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(54) **SYSTEM AND METHOD FOR MANAGING CONTENT DELIVERY AND MEASURING ENGAGEMENT**

(60) Provisional application No. 61/016,801, filed on Dec. 26, 2007, provisional application No. 61/187,124, filed on Jun. 15, 2009.

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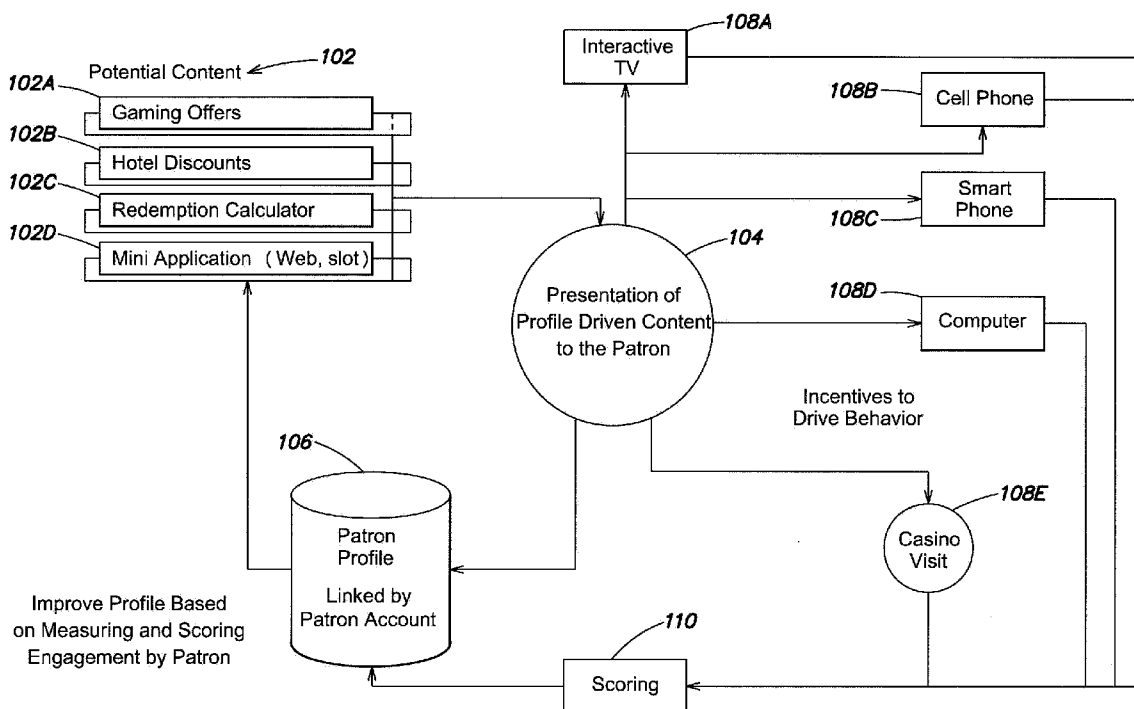
(57) **ABSTRACT**

A system, method and apparatus are provided to combine a casino or lottery player club with a system that provides a unified platform and middleware for the production, delivery, management and measurement of consumer engagement across multiple delivery mechanisms, networks, applications, platforms and marketing channels. The gambling establishment is thereby able to gather valuable player engagement data, build player profiles, and determine how to most effectively cost effectively reach, entertain and influence the behavior of their most valuable consumers.

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(63) Continuation-in-part of application No. 12/345,289, filed on Dec. 29, 2008, Continuation-in-part of application No. 12/238,849, filed on Sep. 26, 2008.



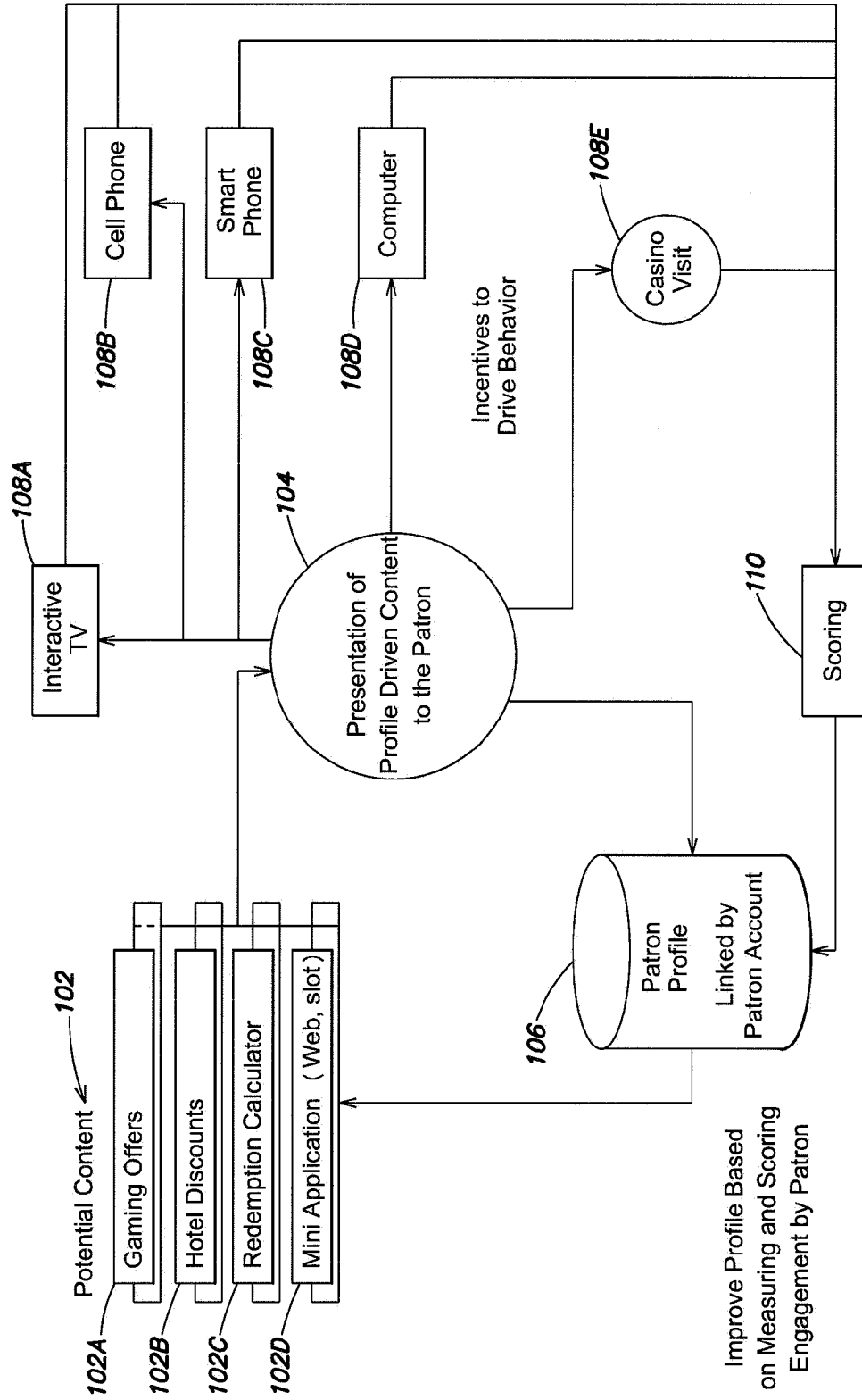


FIG. 1

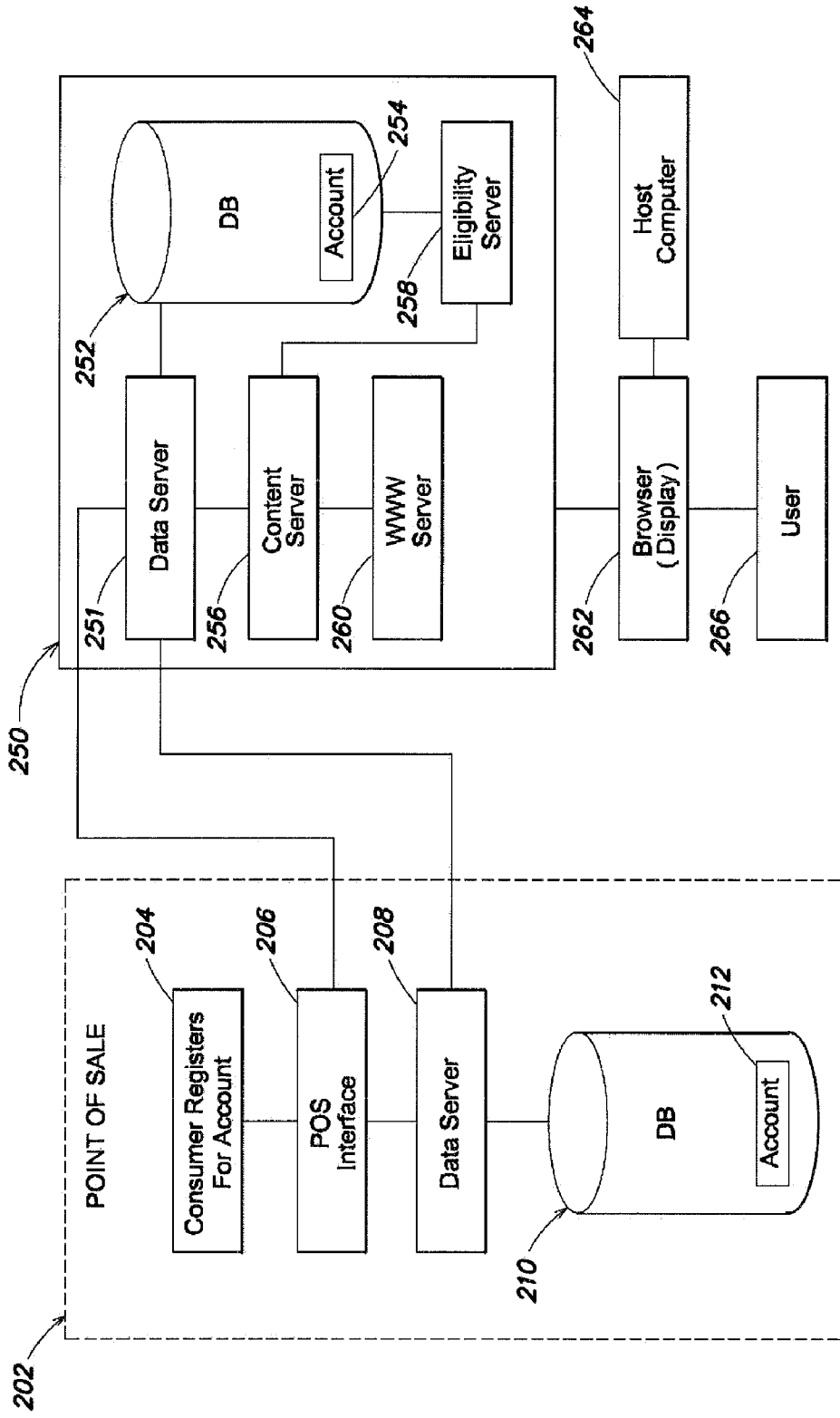


FIG. 2

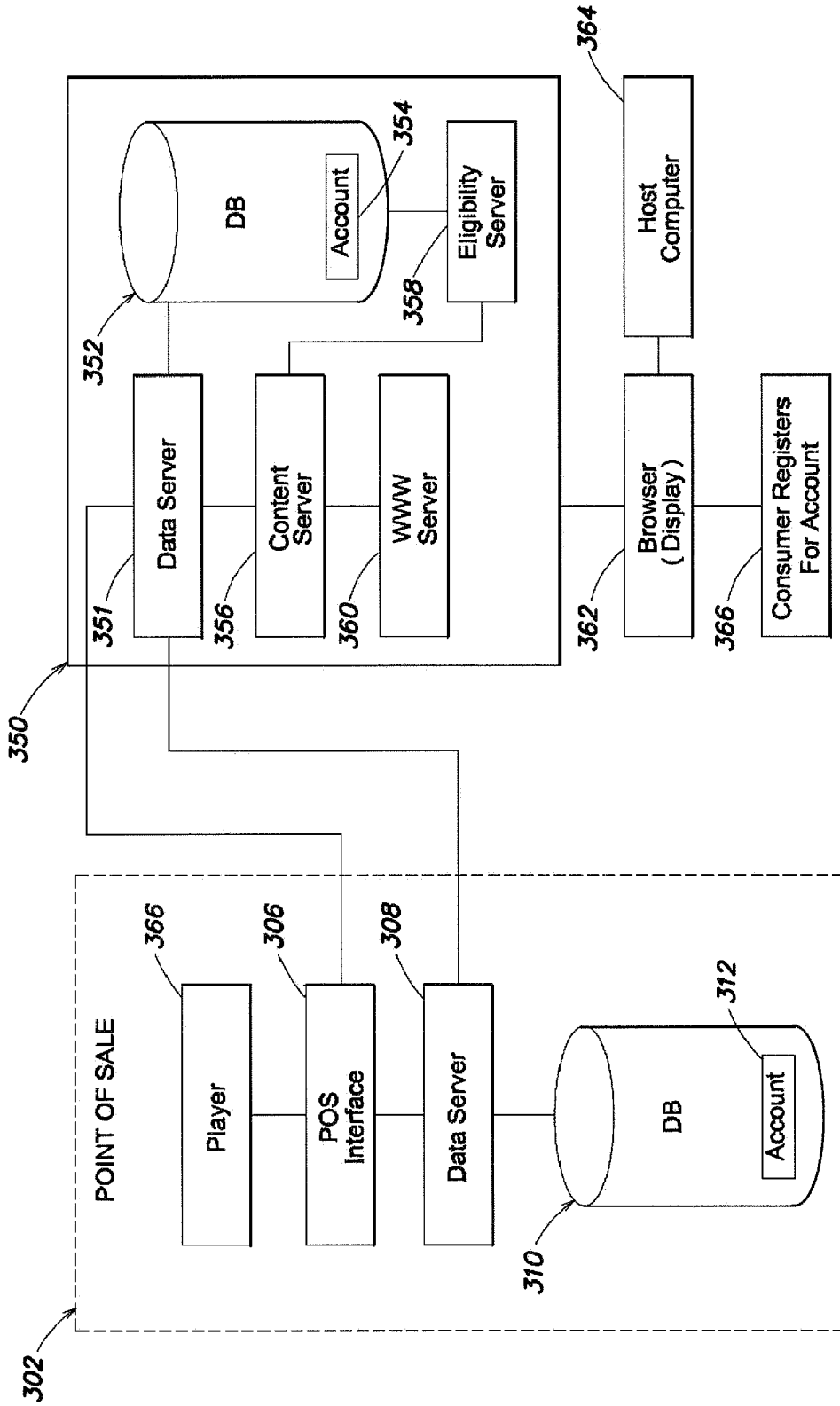


FIG. 3

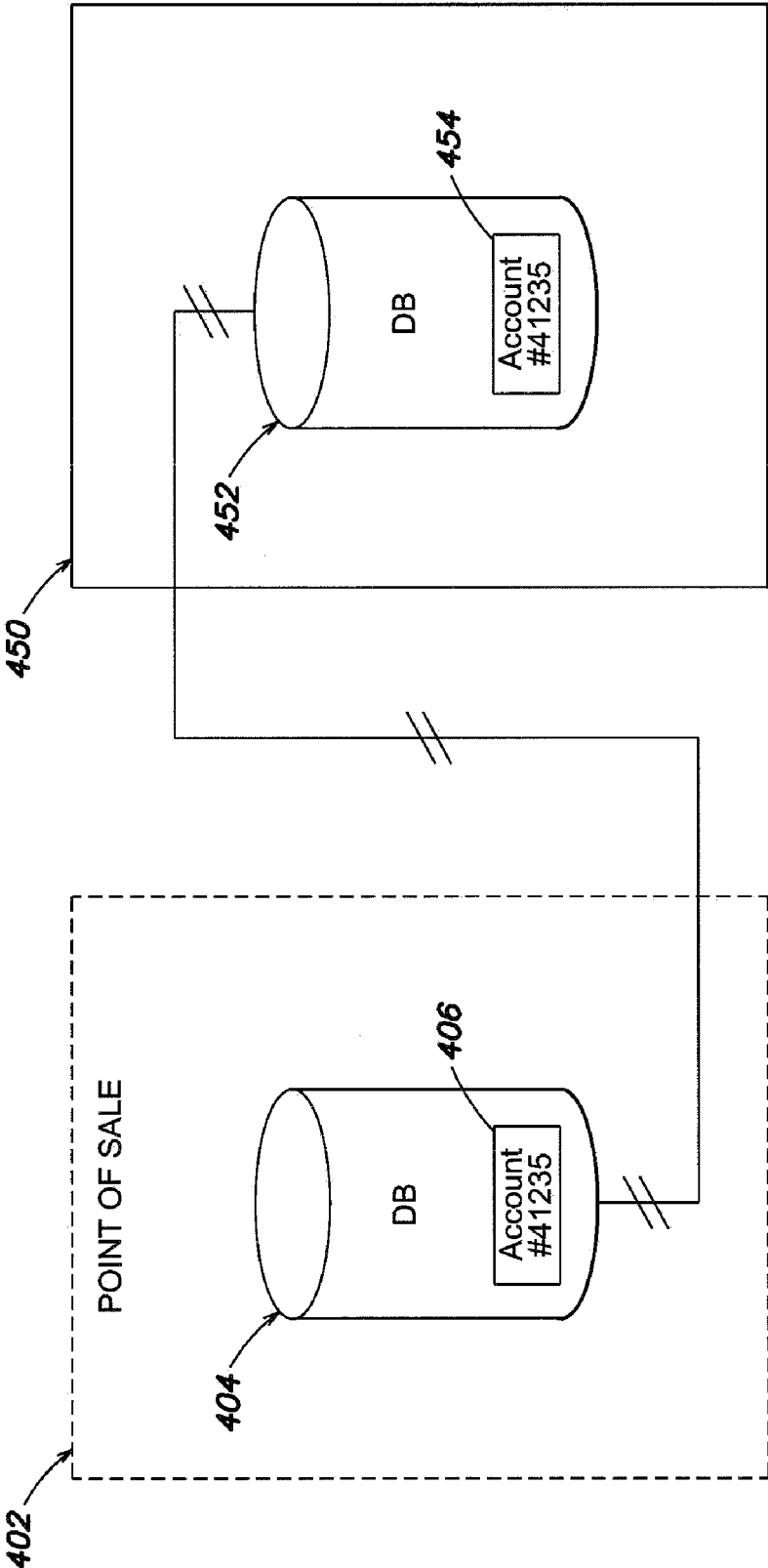


FIG. 4

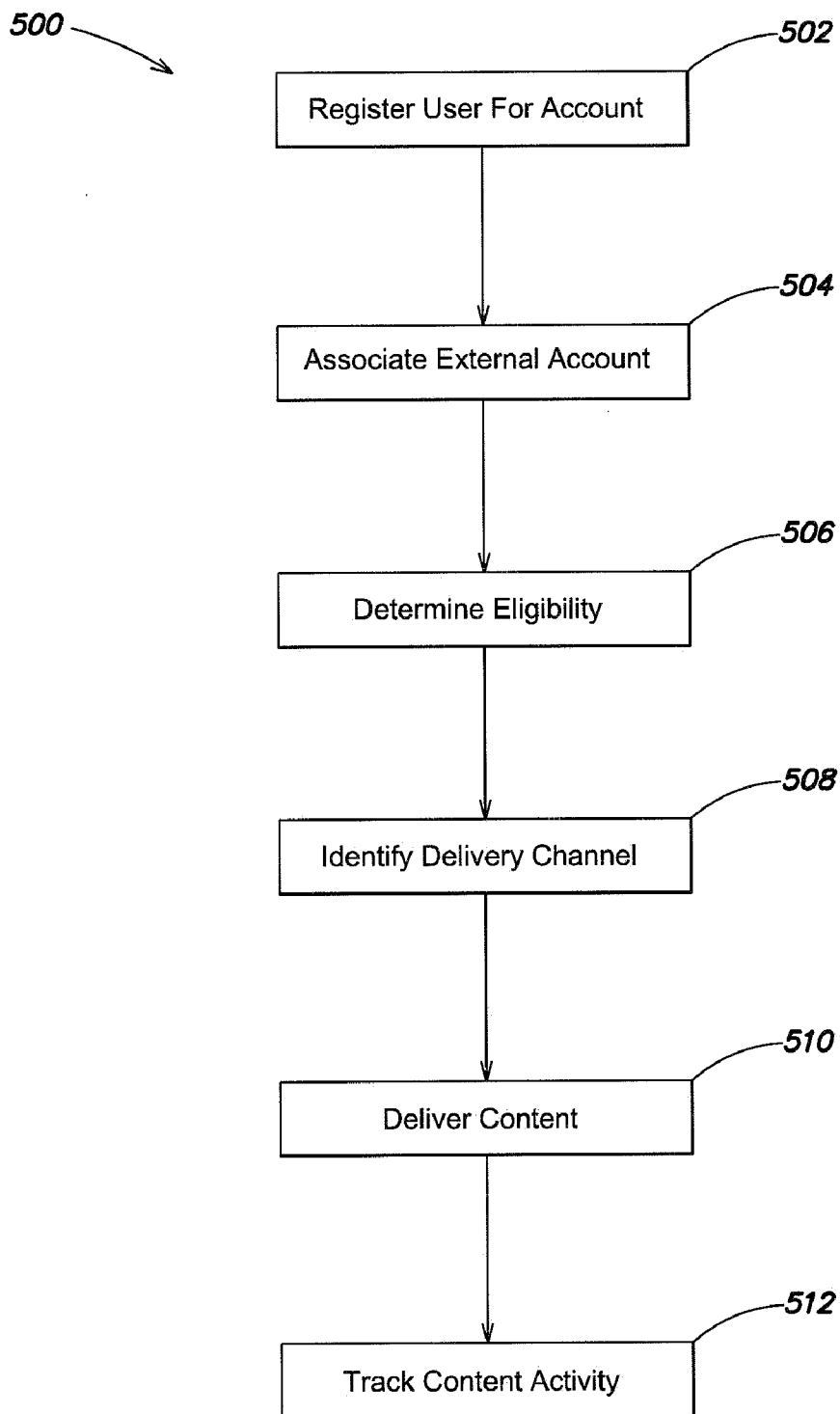


FIG. 5

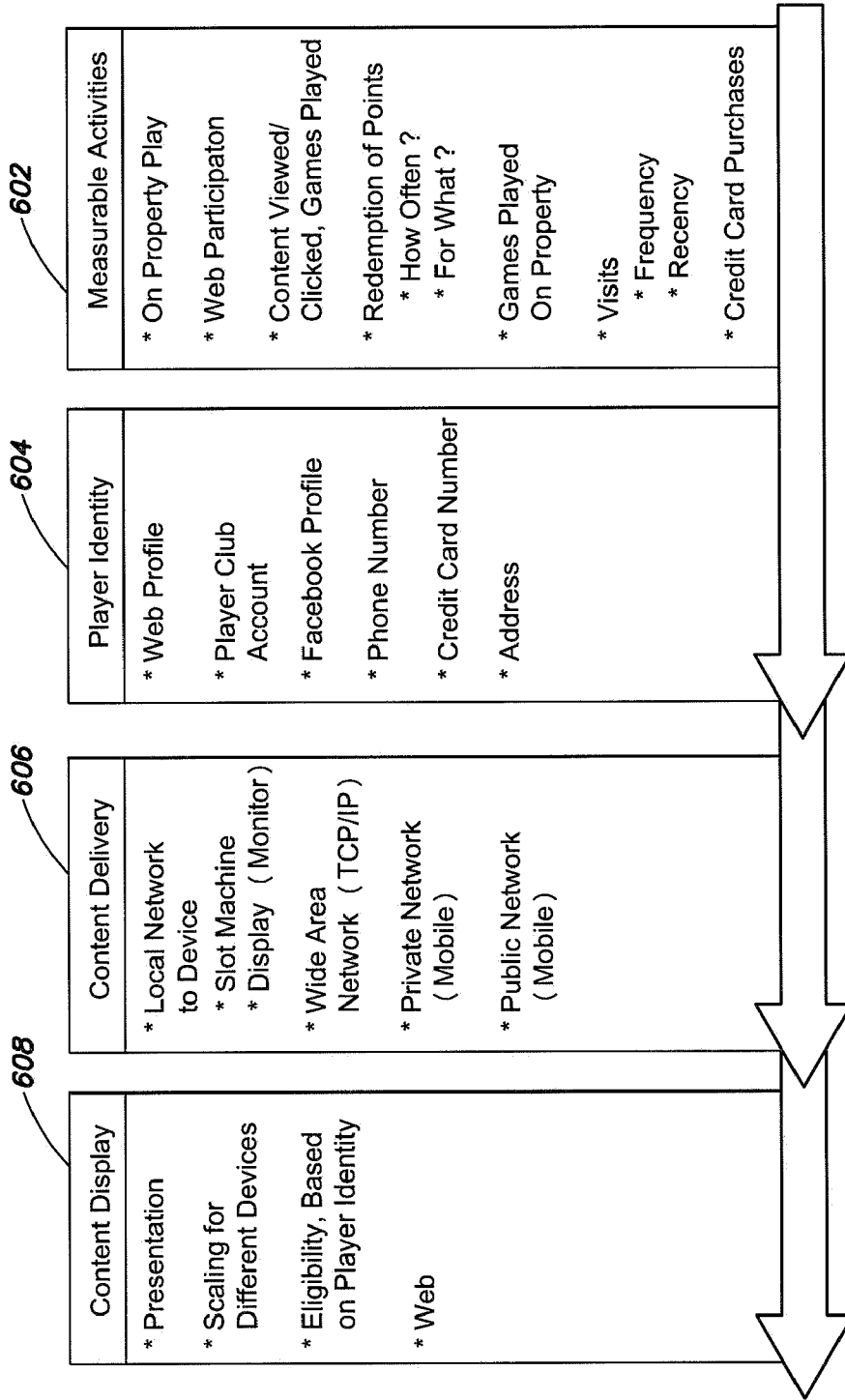


FIG. 6

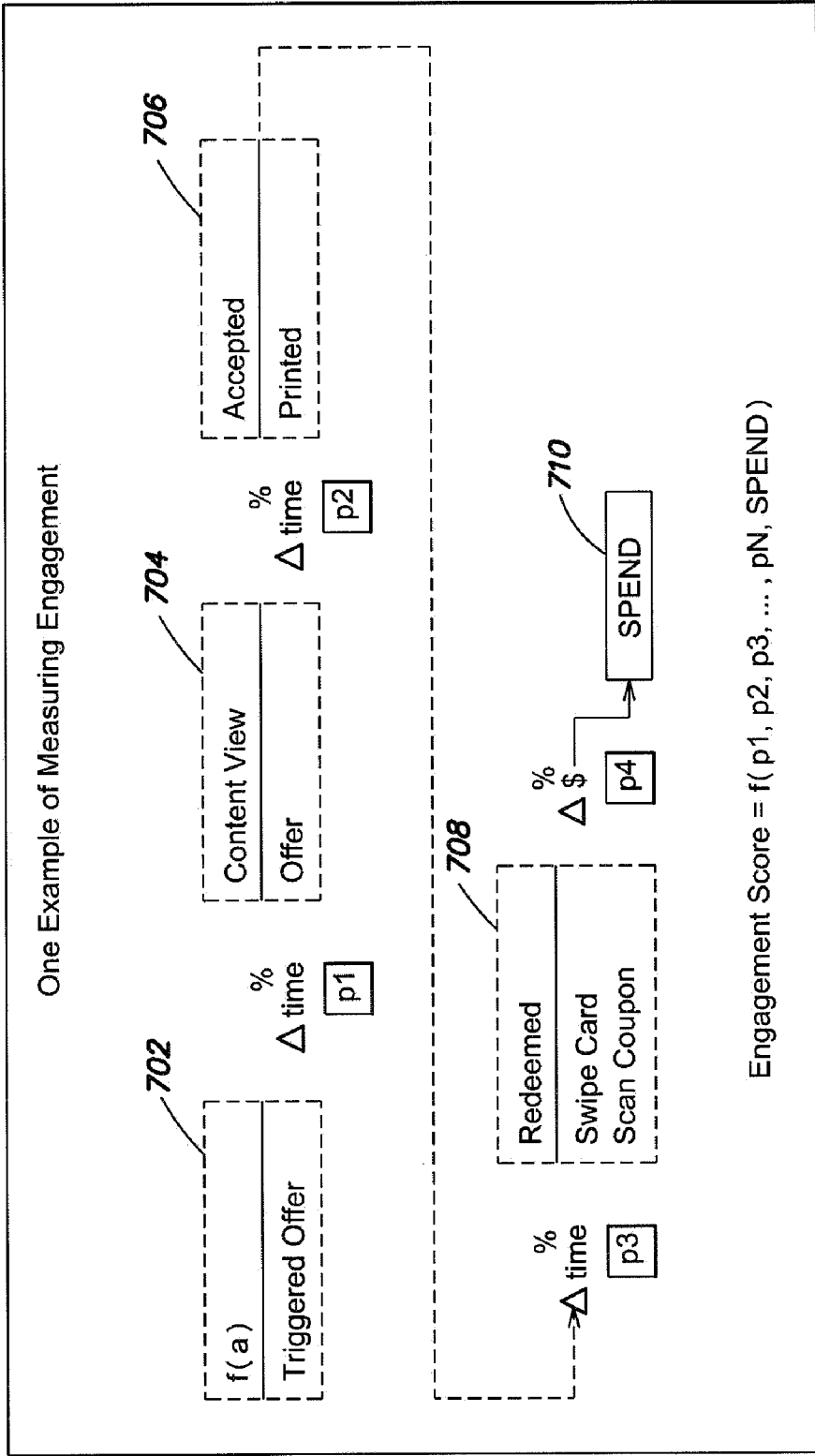


FIG. 7

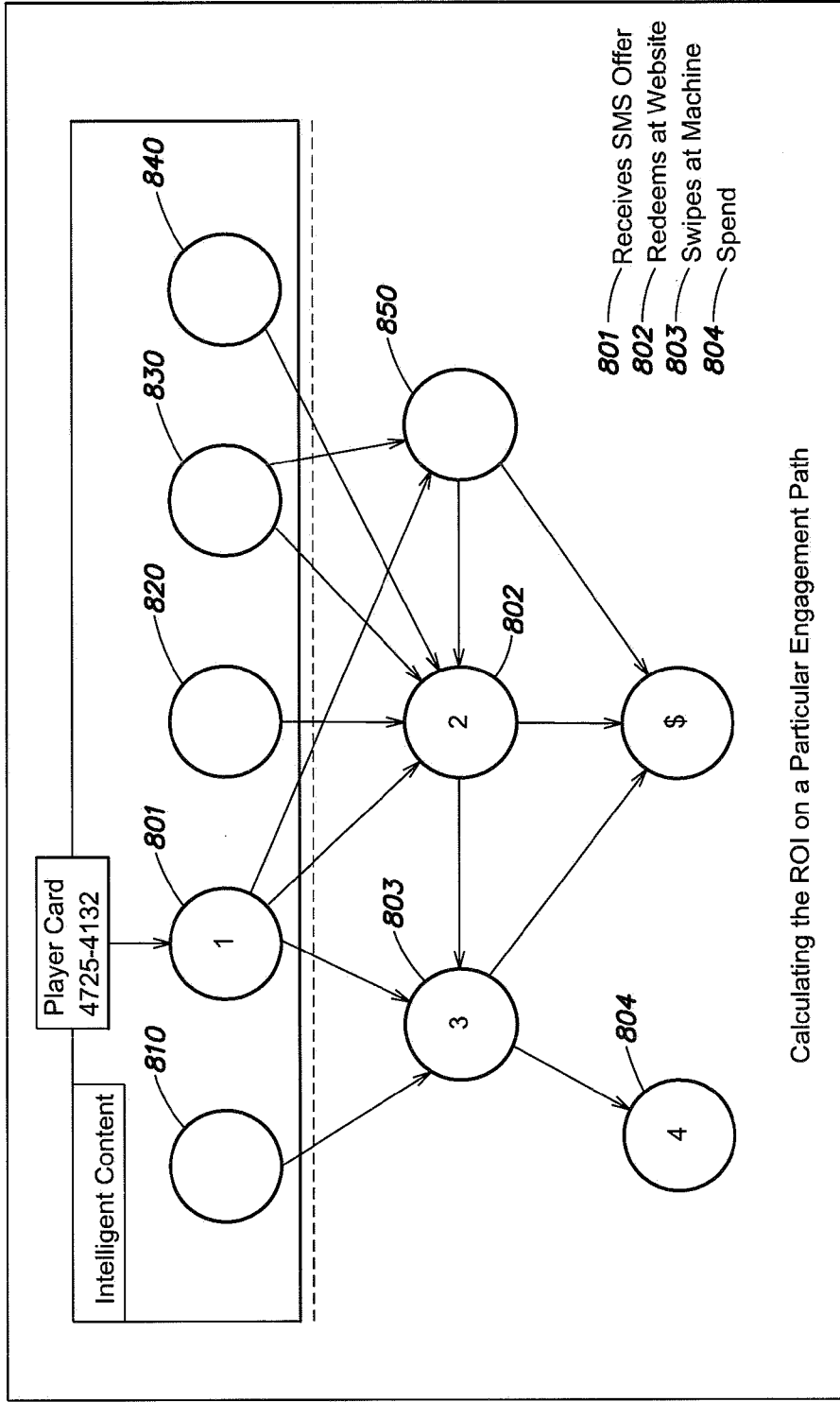


FIG. 8

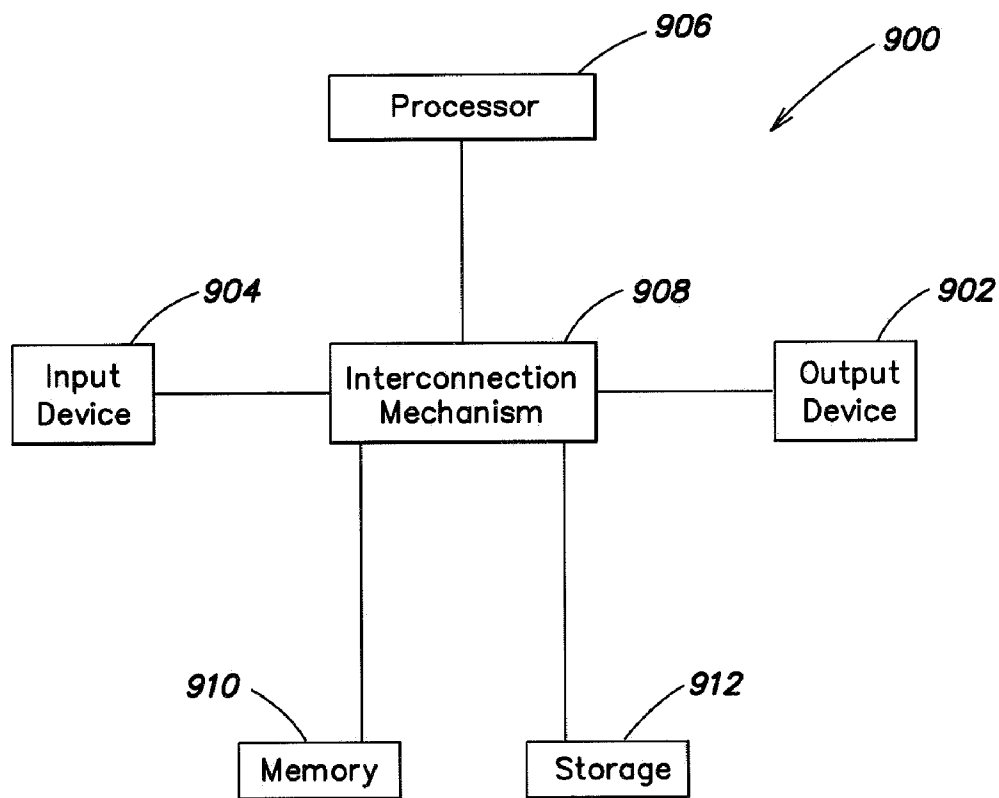


FIG. 9

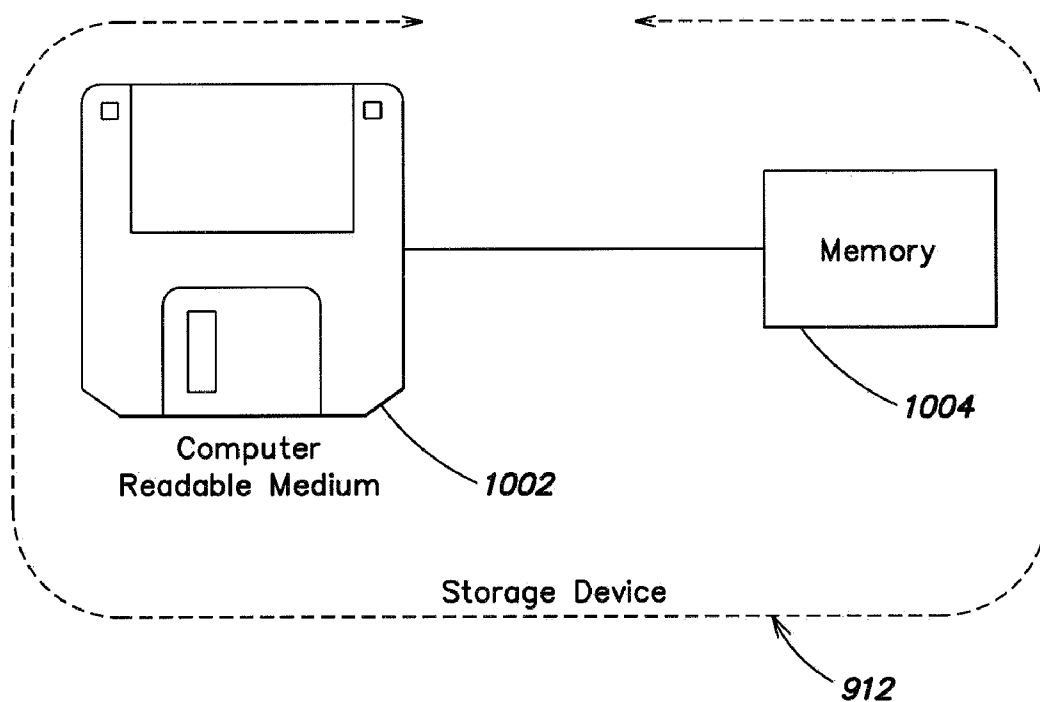


FIG. 10

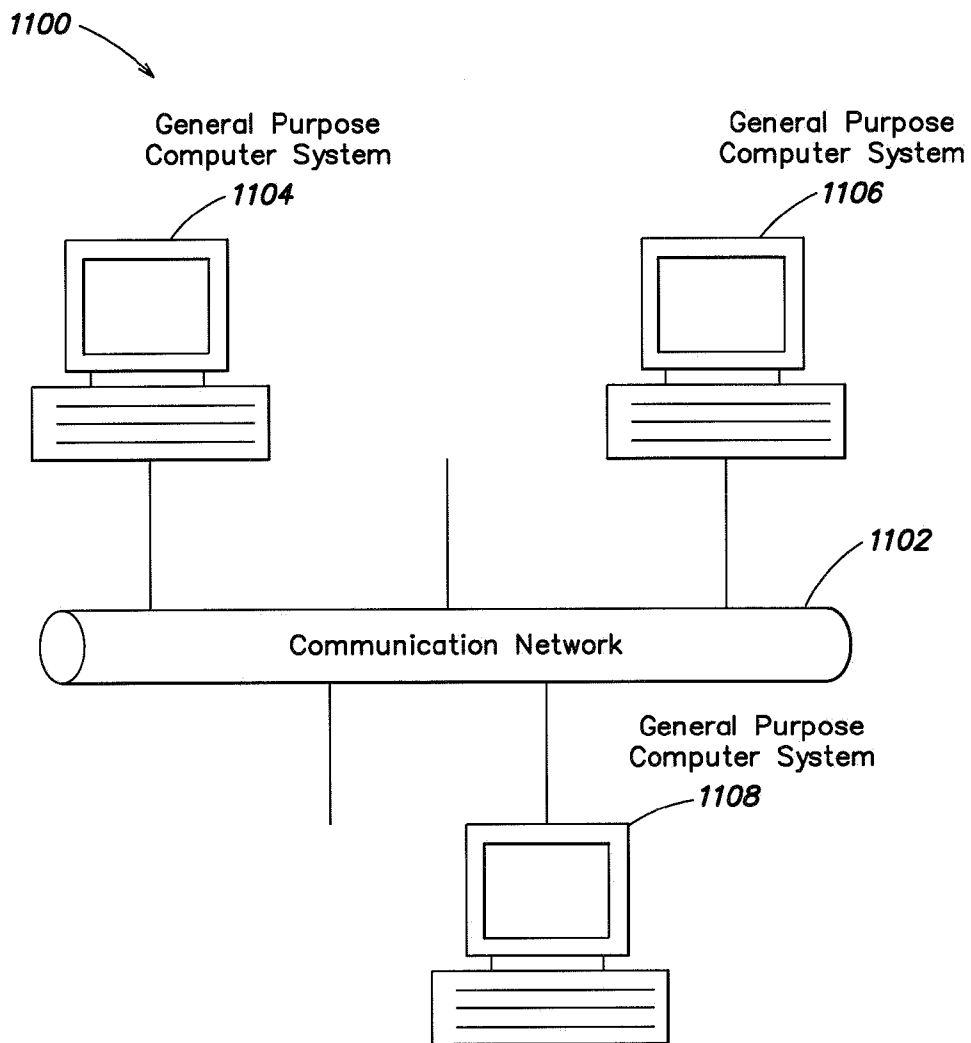


FIG. 11

SYSTEM AND METHOD FOR MANAGING CONTENT DELIVERY AND MEASURING ENGAGEMENT

RELATED APPLICATIONS

[0001] This application is a continuation-in-part of, and claims priority under 35 U.S.C. §120 to U.S. patent application Ser. No. 12/345,289, entitled "SYSTEM AND METHOD FOR COLLECTING AND USING PLAYER INFORMATION," filed on Dec. 29, 2008, which claims priority under 35 U.S.C. 119(e) to U.S. Provisional Application Ser. No. 61/016,801, entitled "SYSTEM AND METHOD FOR COLLECTING AND USING PLAYER INFORMATION," by Mark Herrmann et al., filed Dec. 26, 2007, each of which applications are incorporated herein by reference in their entirety. This application is also a continuation-in-part of, and claims priority under 35 U.S.C. §120 to U.S. patent application Ser. No. 12/238,849 entitled "METHOD AND APPARATUS FOR PROVIDING PLAYER INCENTIVES," filed on Sep. 6, 2008, which application is incorporated by reference herein in its entirety. This application claims priority under 35 U.S.C. §119(e) to U.S. Patent Application Ser. No. 61/187,124, entitled "SYSTEM AND METHOD FOR MANAGING CONTENT DELIVERY AND MEASURING ENGAGEMENT," by Mark Herrmann et al., filed on Jun. 15, 2009, which application is incorporated herein by reference in its entirety.

FIELD OF INVENTION

[0002] The field of the invention relates generally to gaming, collecting and using information relating to player engagement through multiple marketing channels to unify marketing efforts and make them more impactful, profitable and efficient.

BACKGROUND

[0003] It can be appreciated that gambling establishments (e.g., casino, lottery other lawful gambling establishments) have a desire to keep their players engaged and interested in their brand. Player loyalty clubs, "member's only" clubs, or similar programs are a common method used by gambling establishments to attempt to achieve this goal. These clubs typically provide one or more benefits to players, such as discounts, advanced notification of news and events, mailing lists, and other benefits.

[0004] It has become a common practice for these establishments to expose certain aspects of their club experience through an interactive medium, such as a website. Interactive content made available to patrons through an interactive medium tends to vary from display of a patron's player club points to tools that enable patrons the ability to book hotel rooms online. Even though the content and tools provide some utility to members of the club, it remains a constant challenge for gaming establishment to provide content that continually attracts and engages members so that they interact on a frequency that is valuable to the gaming establishment. Gaming establishments often find they must invest a significant amount of time and money into promoting return visitation to interactive content. It can be appreciated that content and tools that attract without the need for a significant investment in continually marketing the content and tools is highly valuable to the gaming establishment. Through the ever evolving advancements in modern technology, such as

mobile telephones, laptop computers, wireless internet connections, and interactive television, reaching and engaging players has become increasingly more challenging for marketing organizations. The average consumer receives hundreds if not thousands of marketing messages daily, through various marketing channels. It can be appreciated that cutting through that clutter and being noticed by a consumer has become more costly and requires a much higher level of sophistication.

[0005] Not only has modern technology allowed for an explosion in communication and engagement options for the player, but has equally increased the number of marketing tools and options available to marketing professionals. Direct mail, billboards, radio and television have been the traditional channels used in a gaming establishment's marketing arsenal. Email marketing, web advertising, Twitter, Facebook, SMS, mobile technology, SEO, "Micro-sites" are examples of new methods that may be used by some gambling establishments to reach and engage a player. This has raised the level of intellectual knowledge and education that someone in the role of marketing requires to produce results necessary for the success of a casino or lottery organization.

[0006] Technology has not only advanced the number of available external marketing channels, but also through the introduction of network-based casino management systems, has created new internal channels for delivering content and messages to a player while they are at the gaming establishment.

[0007] With the emergence of these new external and internal channels, it has become increasingly more challenging for any marketing organization to effectively manage messaging and content across these channels as well as measure the performance of their marketing initiatives. The knowledge required to manage a unified marketing campaign among one or many of these channels becomes more and more costly as newer channels emerge. To get the best return on investment, each channel requires a significant amount of human attention and intellectual capital. To continually operate within all of the channels requires a significant amount of operational support and monetary investment.

[0008] Any effort to produce the level of sophistication and resource necessary to effectively manage a casino or lottery marketing initiative for their player club must include a capability to determine the most effective delivery mechanisms to reach their consumers, measure engagement across the most effective delivery channels and track subsequent and connected actions taken by the consumer once they have engaged. With this capability, a gaming establishment can then determine the content, applications, channels, networks and tools that most effectively drive revenue and deliver the best return on investment.

SUMMARY

[0009] Improved systems, methods and apparatus are required to provide marketing professionals within the casino, lottery and gaming industries a unified platform and middleware for the production, delivery, management and measurement of consumer engagement across multiple delivery mechanisms, networks, applications, platforms and marketing channels.

[0010] According to one aspect, systems and methods are provided for managing interactive player engagement with content. Various aspects of the systems and methods manage the content to be delivered, the mechanism through which the

content is delivered, determination of eligibility to receive the content, and can also provide for user, system and/or operator configurable preferences for any of the content, the delivery mechanism, and the adaptation of the content and/or delivery based on performance information. Additional aspects of systems and methods for managing interactive player engagement with content include systems and methods for tracking and/or reporting on activity associated with delivered content, whether the information source is internal or external and also provides for retrieval through interface elements. In one example, content is delivered in association with unique identifying information, that enables tracking of access to the content and tracking of any activity associated with the accessed content.

[0011] According to one aspect a method for managing interactive user engagement is provided. The method comprises the acts of registering, over a computer network, a user for a user account, associating, by a computer system, an external account with the user account, determining, by the computer system, eligibility of the user to receive content, identifying, by the computer system, at least one delivery channel, wherein the delivery channel conveys a communication configured to provide the content in a perceptible form to the user, delivering the content to the user over the at least one delivery channel, and tracking, by the computer system, content associated activity.

[0012] According to one embodiment, user accounts are viewed from the perspective of an online incentive system. The online incentive system provides offers and opportunities that incent user behavior. In one example, the online incentive system provides offers and opportunities to a user population to incent the users to visit a gambling location. External systems and accounts are viewed from the same perspective. In other words, the user accounts that provide access to the incentive system, the management accounts for the incentive system, the computer systems and processes that support the incentive system are all internal while the gambling location's user accounts are external to the incentive system. One should appreciate, in light of the present disclosure, that interaction between the incentive system and external systems facilitates the process of incenting behavior of the user population. However, in practice it has often been difficult to achieve cooperation between such entities. Further, other external accounts exist and can include information on the users of the user population that can be employed to refine any incentive approach. External accounts are discussed in greater detail herein, and can include cell phone service accounts, online e-mail accounts, to provide a few examples.

[0013] In one embodiment, the external account comprises a third party service, and further requires user identification to access the third party service. In another embodiment, the act of associating, by the computer system, the external account with the user account includes an act of generating the external account on behalf of the user. In another embodiment, the external account includes at least one of casino or lottery player club accounts, FACEBOOK accounts, TWITTER accounts, MYSPACE accounts, email accounts, SMS accounts (cell phone number), loyalty accounts, frequent flyer accounts, and frequent traveler accounts. In yet another embodiment, the external account comprises a user reward account.

[0014] In one embodiment, the act of registering, over a computer network, the user for the user account includes an act of associating information with the user account. In

another embodiment, the information includes at least one of demographic and preference information. In another embodiment, the demographic and the preference information includes at least one of first name, last name, date of birth, zip code, phone number, gender, marital status, number of children, income, favorite drink, preferred games, favorite gaming establishments, most frequented gaming establishments, average spend per gaming visit, bet limits, inclusion on gaming restriction list. In another embodiment, the method comprises an act of establishing a user profile associated with a user account. In yet another embodiment, the user profile includes demographic and preference information.

[0015] In one embodiment, the method further comprises an act of permitting a user to define preference information associated with the at least one delivery channel. In another embodiment, the method further comprises an act of establishing preference information associated with the at least one delivery channel. In yet another embodiment, the method further comprises an act of recording preference information associated with the at least one delivery channel with a user profile. In one embodiment, the act of registering, over a computer network, the user for the user account includes an act of providing for generation of an external account for the user. In another embodiment, the act of providing for generation of an external account for the user includes transmitting user information to an external account generation system. In another embodiment, the external account generation system includes at least one of a casino management system and a lottery management system.

[0016] In another embodiment, the method further comprises an act of identifying external accounts associated with the user. In another embodiment, the method further comprises an act transmitting a request to external account providers to determine existence of an external account. In another embodiment, the method further comprises an act of mining data for a user's computer system. In yet another embodiment, the method further comprises an act of identifying an external account based, at least in part, the data captured from the user's computer system.

[0017] In another embodiment, the method further comprises an act of requesting the user to identify external accounts during registration. In another embodiment, the method further comprises an act of registering a user for an external account, and wherein the act of the registering, over a computer network, the user for the user account occurs in response to the act of registering the user for an external account. In another embodiment, the method further comprises an act of scoring the user based at least in part of information associated with the user account. In another embodiment, the method further comprises an act of updating the user account with information associated with the user. In yet another embodiment, the method further comprises an act of updating the user profile with information associated with the user. In another embodiment, the information associated with the user includes at least one of demographic information, user activity occurring at a gambling location, user activity occurring at an affiliated location, user activity occurring at a redemption location, user online activity, and user offline activity. In another embodiment, the act of identifying, by the computer system, the at least one delivery channel includes an act of determining a preferred delivery channel. In another embodiment, the preferred delivery channel is assigned by the computer system.

[0018] In one embodiment, the preferred delivery channel is defined in a user profile. In another embodiment, the preferred delivery channel is defined according to the content delivered. In another embodiment, the preferred delivery channel is determined dynamically.

[0019] In another embodiment, the preferred delivery channel is determined dynamically based at least in part on a calculation of return. In another embodiment, the preferred delivery channel is determined dynamically based at least in part on a prediction of return. In another embodiment, the preferred delivery channel is determined dynamically based at least in part on the user profile. In another embodiment, the preferred delivery channel is determined based at least in part on user profile and user behavior.

[0020] In one embodiment, the act of identifying, by the computer system, the at least one delivery channel includes determining at least one of a jurisdictional limitation, a user preference, a scoring based on user associated information, a selection based on content associated information, a probability of engagement, and a prediction of engagement. In another embodiment, the method further comprises an act of associating a delivery channel with the user.

[0021] In another embodiment, the method further comprises an act of associating a delivery channel with the user account. In another embodiment, the delivery channel includes at least one of an email service provider, an email address, a phone carrier, a home phone number, a business phone number, an automated calling and telemarketing system ("robo-dialing"), a cell phone carrier, a cell phone number, an electronic billboard, online advertising, online advertising networks, a blog, a blog network, a FACEBOOK page, a FACEBOOK account, a MYSPACE page, a MYSPACE account, a TWITTER page, a TWITTER account, a billboard, a classified ad, a classified advertising network, an online classified advertising network, an advertising network, an advertising agency, a brochure, a postcard, a website, a webpage, and a personal webpage that requires login by the user.

[0022] In one embodiment the method further comprises an act of creating a unique identifier for the delivery channel. In another embodiment, the unique identifier is unique with respect to other delivery channels. In another embodiment, the unique identifier is unique with respect to the delivery channel and the user. In another embodiment, the method further comprises an act of classifying the delivery channel. In another embodiment, the method further comprises an act of creating a channel profile. In another embodiment, the act of classifying the delivery channel includes storing characteristics of the delivery channel. In another embodiment, the characteristics of the delivery channel includes a device profile for a device used by the user to perceive the communication. In another embodiment, the device profile identifies characteristics associated with at least one device, wherein the characteristics include at least one of display size, permissible content, media delivery type, optimal format for content delivery, messaging size constraints, and content format constraint.

[0023] In another embodiment, the act of classifying the delivery channel includes an act of storing characteristics associated with a delivery device. In another embodiment, the delivery device includes at least one of a cell phone, a mobile device, a laptop, and a desktop computer. In another embodiment, the method further comprises an act of establishing filtering rules for the delivery channel. In another embodi-

ment, the filtering rules prohibit delivery of the content over the delivery channel. In another embodiment, the act of classifying the delivery channel includes an act of storing historical activity information associated with delivered content. In another embodiment, the historical activity information includes information on success of delivery of the content, timing of access to the content, and timing of redemption of the content.

[0024] In one embodiment, the method further comprises an act of identifying a preferred delivery channel based, at least in part, on historical activity information. In one embodiment, the method further comprises an act of classifying the content. In another embodiment, the method further comprises an act of associating the content with the at least one delivery channel. In another embodiment, the method further comprises an act of associating an identifier with the content. In another embodiment, the identifier uniquely identifies the content with respect to other content. In another embodiment, the content includes at least one of adobe PDF application, web application, javaScript application, AJAX application, HTML Application, WAP Application, MMS Application, SMS Application, iPhone Application, BREW Application, J2ME Application, J2EE Application, Java Application, PHP Application, python application, C/C++ Application, C# Application, Visual Basic Application, Microsoft .NET Application, Google Gears Application, Facebook Application, Compiled Application, Downloadable Application, a text message, a HTML Message, an email, a SMS message, an offer, a voucher, a coupon, a barcode, an image, questionnaire application, quiz application, personal rewards points display application, personal jackpot counters and displays, generic jackpot counters and displays, personal and general sweepstakes status displays, personal contest leader boards, generic contest leader boards, personal (targeted) and general calendar, personal (targeted) advertising displays, personal rewards calculator that indicates when rewards are achieved next, video display application, video streaming application, live video streaming application, video conferencing application, generic rewards calculator, personal diary, personal room reservation information, room reservation application, personal event reservation and ticket information, event reservations and ticket purchase application, travel reservation and ticket purchase information, and travel reservations and ticket purchase application.

[0025] In another embodiment, the act of associating the content with the at least one delivery channel includes an act of identifying a delivery channel used with the content. In another embodiment, the act of identifying the delivery channel occurs in response to information received from at least one of the user, the operator, the content provider, and a dynamic determination of an optimal delivery channel. In another embodiment, the act of identifying the delivery channels includes identification of a plurality of delivery channels.

[0026] In another embodiment, the method further comprises an act of generating a content profile. In another embodiment, the content profile includes delivery triggers associated with the content. In another embodiment, the act of delivering the content to the user over the at least one delivery channel occurs in response to a determination that the criteria for the delivery trigger has been satisfied. In another embodiment, the act of delivering the content to the user over the at least one delivery channel includes an act of packing the content for delivery. In another embodiment, the act of packing the content for delivery includes an act of scaling the

content. In another embodiment, the act of scaling the content includes an act of altering the content to correspond to channel characteristics. In another embodiment, the act of determining, by the computer system, eligibility of the user to receive the content includes a determination that the user meets predetermined criteria. In another embodiment, the predetermined criteria include a user selection to opt-in to receiving the content. In another embodiment, the predetermined criteria includes a minimum score associated with the user. In another embodiment, the predetermined criteria includes a minimum value associated with the user.

[0027] In another embodiment, the method further comprises an act of scaling the content based, at least in part, on the value associated with the user. In another embodiment, the predetermined criteria include limitations on the content. In another embodiment, the limitations include a jurisdictional limit. In another embodiment, the limitations include a user defined limit. In another embodiment, the predetermined criteria includes at least one of access to previously delivered content and redemption of previously delivered content. In another embodiment, the predetermined criteria includes an eligibility matrix. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking metrics associated with successful delivery of the content. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking a success as access to the content by the user. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking a success as redemption of the content by the user. In another embodiment, the act of tracking, by the computer system, content associated activity includes recording a status associated with the at least one delivery channel. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking redemption of the content. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking access to the content. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking timing of any access and any redemption of the content. In another embodiment, the act of tracking, by the computer system, content associated activity includes accepting information from external accounts.

[0028] In another embodiment, the method further comprises an act of updating a user profile based on the content associated activity. In another embodiment, the method further comprises an act of generating an optimal engagement path for a user. In another embodiment, the calculation of return includes a determination of cost of delivery, probability of redemption, and value of redemption. In another embodiment, the prediction of return includes a prediction of cost of delivery, of redemption, and value of redemption. In another embodiment, the method further comprises the acts of establishing a user record, wherein the user record is capable of uniquely identifying a user, delivering content to a user population based on demographic information associated with the player population, uniquely identifying user from within the user population, and wherein the act of registering the user includes an act of associating an identified user with the user record.

[0029] According to another aspect a method for determining an optimal engagement path for content delivery to at least one user is provided. The method comprises establishing at least one delivery channel for communicating with the at least

one user, delivery content to the at least one user over the at least one delivery channel, tracking successful delivery to the at least one user over the at least one delivery channel, and determining an optimal delivery path for any content.

[0030] According to one aspect of the present invention, a non-transient computer-readable medium having computer-readable signals stored thereon that define instructions that, as a result of being executed by a processor, instruct the processor to perform a method for managing interactive user engagement is provided. The method comprises the acts of registering, over a computer network, a user for a user account, associating, by a computer system, an external account with the user account, determining, by the computer system, eligibility of the user to receive content, identifying, by the computer system, at least one delivery channel, wherein the delivery channel conveys a communication configured to provide the content in a perceptible form to the user, delivering the content to the user over the at least one delivery channel, and tracking, by the computer system, content associated activity. In one embodiment, the external account comprises a third party service, and further requires user identification to access the third party service. In another embodiment, the act of associating, by the computer system, the external account with the user account includes an act of generating the external account on behalf of the user. In another embodiment, the external account includes at least one of casino or lottery player club accounts, FACEBOOK accounts, TWITTER accounts, MYSPACE accounts, email accounts, SMS accounts (cell phone number), loyalty accounts, frequent flyer accounts, and frequent traveler accounts. In yet another embodiment, the external account comprises a user reward account.

[0031] In one embodiment, the act of registering, over a computer network, the user for the user account includes an act of associating information with the user account. In another embodiment, the information includes at least one of demographic and preference information. In another embodiment, the demographic and the preference information includes at least one of first name, last name, date of birth, zip code, phone number, gender, marital status, number of children, income, favorite drink, preferred games, favorite gaming establishments, most frequented gaming establishments, average spend per gaming visit, bet limits, inclusion on gaming restriction list. In another embodiment, the method comprises an act of establishing a user profile associated with a user account. In yet another embodiment, the user profile includes demographic and preference information.

[0032] In one embodiment, the method further comprises an act of permitting a user to define preference information associated with the at least one delivery channel. In another embodiment, the method further comprises an act of establishing preference information associated with the at least one delivery channel. In yet another embodiment, the method further comprises an act of recording preference information associated with the at least one delivery channel with a user profile. In one embodiment, the act of registering, over a computer network, the user for the user account includes an act of providing for generation of an external account for the user. In another embodiment, the act of providing for generation of an external account for the user includes transmitting user information to an external account generation system. In another embodiment, the external account generation system includes at least one of a casino management system and a lottery management system.

[0033] In another embodiment, the method further comprises an act of identifying external accounts associated with the user. In another embodiment, the method further comprises an act of transmitting a request to external account providers to determine existence of an external account. In another embodiment, the method further comprises an act of mining data for a user's computer system. In yet another embodiment, the method further comprises an act of identifying an external account based, at least in part, the data captured from the user's computer system.

[0034] In another embodiment, the method further comprises an act of requesting the user to identify external accounts during registration. In another embodiment, the method further comprises an act of registering a user for an external account, and wherein the act of the registering, over a computer network, the user for the user account occurs in response to the act of registering the user for an external account. In another embodiment, the method further comprises an act of scoring the user based at least in part of information associated with the user account. In another embodiment, the method further comprises an act of updating the user account with information associated with the user. In yet another embodiment, the method further comprises an act of updating the user profile with information associated with the user. In another embodiment, the information associated with the user includes at least one of demographic information, user activity occurring at a gambling location, user activity occurring at an affiliated location, user activity occurring at a redemption location, user online activity, and user offline activity. In another embodiment, the act of identifying, by the computer system, the at least one delivery channel includes an act of determining a preferred delivery channel. In another embodiment, the preferred delivery channel is assigned by the computer system.

[0035] In one embodiment, the preferred delivery channel is defined in a user profile. In another embodiment, the preferred delivery channel is defined according to the content delivered. In another embodiment, the preferred delivery channel is determined dynamically. In another embodiment, the preferred delivery channel is determined dynamically based at least in part on a calculation of return. In another embodiment, the preferred delivery channel is determined dynamically based at least in part on a prediction of return. In another embodiment, the preferred delivery channel is determined dynamically based at least in part on the user profile. In another embodiment, the preferred delivery channel is determined based at least in part on user profile and user behavior.

[0036] In one embodiment, the act of identifying, by the computer system, the at least one delivery channel includes determining at least one of a jurisdictional limitation, a user preference, a scoring based on user associated information, a selection based on content associated information, a probability of engagement, and a prediction of engagement. In another embodiment, the method further comprises an act of associating a delivery channel with the user.

[0037] In another embodiment, the method further comprises an act of associating a delivery channel with the user account. In another embodiment, the delivery channel includes at least one of an email service provider, an email address, a phone carrier, a home phone number, a business phone number, an automated calling and telemarketing system ("robo-dialing"), a cell phone carrier, a cell phone number, an electronic billboard, online advertising, online advertising networks, a blog, a blog network, a FACEBOOK page,

a FACEBOOK account, a MYSPACE page, a MYSPACE account, a TWITTER page, a TWITTER account, a billboard, a classified ad, a classified advertising network, an online classified advertising network, an advertising network, an advertising agency, a brochure, a postcard, a website, a webpage, and a personal webpage that requires login by the user.

[0038] In one embodiment the method further comprises an act of creating a unique identifier for the delivery channel. In another embodiment, the unique identifier is unique with respect to other delivery channels. In another embodiment, the unique identifier is unique with respect to the delivery channel and the user. In another embodiment, the method further comprises an act of classifying the delivery channel. In another embodiment, the method further comprises an act of creating a channel profile. In another embodiment, the act of classifying the delivery channel includes storing characteristics of the delivery channel. In another embodiment, the characteristics of the delivery channel include a device profile for a device used by the user to perceive the communication. In another embodiment, the device profile identifies characteristics associated with at least one device, wherein the characteristics include at least one of display size, permissible content, media delivery type, optimal format for content delivery, messaging size constraints, and content format constraint.

[0039] In another embodiment, the act of classifying the delivery channel includes an act of storing characteristics associated with a delivery device. In another embodiment, the delivery device includes at least one of a cell phone, a mobile device, a laptop, and a desktop computer. In another embodiment, the method further comprises an act of establishing filtering rules for the delivery channel. In another embodiment, the filtering rules prohibit delivery of the content over the delivery channel. In another embodiment, the act of classifying the delivery channel includes an act of storing historical activity information associated with delivered content. In another embodiment, the historical activity information includes information on success of delivery of the content, timing of access to the content, and timing of redemption of the content.

[0040] In one embodiment, the method further comprises an act of identifying a preferred delivery channel based, at least in part, on historical activity information. In one embodiment, the method further comprises an act of classifying the content. In another embodiment, the method further comprises an act of associating the content with the at least one delivery channel. In another embodiment, the method further comprises an act of associating an identifier with the content. In another embodiment, the identifier uniquely identifies the content with respect to other content. In another embodiment, the content includes at least one of adobe PDF application, web application, javaScript application, AJAX application, HTML Application, WAP Application, MMS Application, SMS Application, iPhone Application, BREW Application, J2ME Application, J2EE Application, Java Application, PHP Application, python application, C/C++ Application, C# Application, Visual Basic Application, Microsoft .NET Application, Google Gears Application, Facebook Application, Compiled Application, Downloadable Application, a text message, a HTML Message, an email, a SMS message, an offer, a voucher, a coupon, a barcode, an image, questionnaire application, quiz application, personal rewards points display application, personal jackpot counters

and displays, generic jackpot counters and displays, personal and general sweepstakes status displays, personal contest leader boards, generic contest leader boards, personal (targeted) and general calendar, personal (targeted) advertising displays, personal rewards calculator that indicates when rewards are achieved next, video display application, video streaming application, live video streaming application, video conferencing application, generic rewards calculator, personal diary, personal room reservation information, room reservation application, personal event reservation and ticket information, event reservations and ticket purchase application, travel reservation and ticket purchase information, and travel reservations and ticket purchase application.

[0041] In another embodiment, the act of associating the content with the at least one delivery channel includes an act of identifying a delivery channel used with the content. In another embodiment, the act of identifying the delivery channel occurs in response to information received from at least one of the user, the operator, the content provider, and a dynamic determination of an optimal delivery channel. In another embodiment, the act of identifying the delivery channels includes identification of a plurality of delivery channels.

[0042] In another embodiment, the method further comprises an act of generating a content profile. In another embodiment, the content profile includes delivery triggers associated with the content. In another embodiment, the act of delivering the content to the user over the at least one delivery channel occurs in response to a determination that the criteria for the delivery trigger has been satisfied. In another embodiment, the act of delivering the content to the user over the at least one delivery channel includes an act of packing the content for delivery. In another embodiment, the act of packing the content for delivery includes an act of scaling the content. In another embodiment, the act of scaling the content includes an act of altering the content to correspond to channel characteristics. In another embodiment, the act of determining, by the computer system, eligibility of the user to receive the content includes a determination that the user meets predetermined criteria. In another embodiment, the predetermined criteria include a user selection to opt-in to receiving the content. In another embodiment, the predetermined criteria include a minimum score associated with the user. In another embodiment, the predetermined criteria include a minimum value associated with the user.

[0043] In another embodiment, the method further comprises an act of scaling the content based, at least in part, on the value associated with the user. In another embodiment, the predetermined criteria include limitations on the content. In another embodiment, the limitations include a jurisdictional limit. In another embodiment, the limitations include a user defined limit. In another embodiment, the predetermined criteria include at least one of access to previously delivered content and redemption of previously delivered content. In another embodiment, the predetermined criteria include an eligibility matrix. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking metrics associated with successful delivery of the content. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking a success as access to the content by the user. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking a success as redemption of the content by the user. In another embodiment, the act of tracking, by the computer system, content

associated activity includes recording a status associated with the at least one delivery channel. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking redemption of the content. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking access to the content. In another embodiment, the act of tracking, by the computer system, content associated activity includes tracking timing of any access and any redemption of the content. In another embodiment, the act of tracking, by the computer system, content associated activity includes accepting information from external accounts.

[0044] In another embodiment, the method further comprises an act of updating a user profile based on the content associated activity. In another embodiment, the method further comprises an act of generating an optimal engagement path for a user. In another embodiment, the calculation of return includes a determination of cost of delivery, probability of redemption, and value of redemption. In another embodiment, the prediction of return includes a prediction of cost of delivery, of redemption, and value of redemption. In another embodiment, the method further comprises the acts of establishing a user record, wherein the user record is capable of uniquely identifying a user, delivering content to a user population based on demographic information associated with the player population, uniquely identifying user from within the user population, and wherein the act of registering the user includes an act of associating an identified user with the user record.

[0045] According to another aspect, a computer-readable medium having computer-readable signals stored thereon that define instructions that, as a result of being executed by a processor, instruct the processor to perform a method for determining an optimal engagement path for content delivery to at least one user is provided. The method comprises establishing at least one delivery channel for communicating with the at least one user, delivery content to the at least one user over the at least one delivery channel, tracking successful delivery to the at least one user over the at least one delivery channel, and determining an optimal delivery path for any content.

[0046] According to another aspect a system for managing interactive user engagement is provided. The system comprises a registration component configured to register a user for a user account, an association component configured to associate an external account with the user account, an eligibility component configured to determine eligibility of the user to receive content, a selection component configured to identify at least one delivery channel, wherein the delivery channel conveys a communication configured to provide the content in a perceptible form to the user, a transmission component configured to deliver the content to the user over the at least one delivery channel, and a tracking component configured to track content associated activity.

[0047] According to another aspect a system for determining an optimal engagement path for content delivery to at least one user is provided. The system comprises a registration component configured to establish at least one delivery channel for communicating with the at least one user, a transmission component configured to deliver content to the at least one user over the at least one delivery channel, a tracking component for identifying successful delivery to the at least

one user over the at least one delivery channel, and an optimization component configured to determine an optimal delivery path for any content.

BRIEF DESCRIPTION OF THE DRAWINGS

[0048] Various aspects of at least one embodiment are discussed herein with reference to the accompanying figures, which are not intended to be drawn to scale. The figures are included to provide illustration and a further understanding of the various aspects and embodiments, and are incorporated in and constitute a part of this specification, but are not intended as a definition of the limits of the invention. Where technical features in the figures, detailed description or any claim are followed by reference signs, the reference signs have been included for the sole purpose of increasing the intelligibility of the figures, detailed description, and/or claims. Accordingly, neither the reference signs nor their absence are intended to have any limiting effect on the scope of any claim elements. In the figures, each identical or nearly identical component that is illustrated in various figures is represented by a like numeral. For purposes of clarity, not every component may be labeled in every figure. In the figures:

[0049] FIG. 1 is a illustration of an example of system elements and logic flow for management, delivery, display, engagement, tracking and feedback for content provided to users, according to aspects of the invention;

[0050] FIG. 2 is a block diagram of an example system coupling an online system and external account system, according to aspects of the invention;

[0051] FIG. 3 is a block diagram of an example system coupling an online system and external account system, according to aspects of the invention;

[0052] FIG. 4 is a block diagram of an example system for associating a user account stored on an online system with an external account stored on an external system, according to aspects of the invention;

[0053] FIG. 5 is a an example process for associating external accounts with an online system content system, according to aspects of the invention;

[0054] FIG. 6 is an example process associated with determining eligibility for content driven by measurable activities linked to player identity, according to aspects of the invention;

[0055] FIG. 7 is an illustration of an example process for generating an engagement score, according to aspects of the invention;

[0056] FIG. 8 is an illustration of an example process for calculating return on investment for an engagement path, according to aspects of the invention;

[0057] FIG. 9 is a block diagram of an example system for managing interactive user engagement, according to aspects of the invention;

[0058] FIG. 10 is a block diagram of an example system for managing interactive user engagement, according to aspects of the invention; and

[0059] FIG. 11 is a block diagram of an example system for managing interactive user engagement, according to aspects of the invention.

DETAILED DESCRIPTION

[0060] According to one aspect of this invention, a player club (lottery or casino), profile analysis, behavioral targeting and tracked player engagement is combined with one or more

systems, methods and apparatus to provide marketing professionals within the casino, lottery and gaming industries a unified platform and middleware for the production, delivery, management and measurement of consumer engagement across multiple interactive delivery mechanisms, networks, applications, platforms and marketing channels. These systems, methods and apparatus provide operators with a unique, unified and efficient approach to interactive content delivery, content management and content engagement tracking across all of their potential interactive consumer engagement channels.

System for Managing and Delivering Content and Tracking Engagement

[0061] In one aspect of this invention, an online system exists that provides a facility for the registration and management of online user accounts, the management of user profiles, the association of online user accounts with external accounts (such as player ids and accounts management by a casino management system or a lottery vip club), the identification and management of delivery channels, the storage and management of content, the loading and frequent updating of online and external account data, the processing of online and external account data, the management of user content eligibility, the selection of content for delivery, the scaling and pre-rendering of content for delivery, the user specified, rules-based and scripted delivery of content, measurement of content receipt, the tracking of engagement with content, and the tracking of subsequent and related actions taken by the user.

[0062] For example, an online player web portal is provided as a content delivery channel by a casino player club or a lottery VIP club. Through this channel, consumers are provided the ability to register for a user account and interact online with content made eligible to them and delivered by the system. The online player web portal allows the user, once they have registered, to create a profile and to add and modify profile attributes, such as favorite drink, favorite games, preferred sports, and profile photo. The system provides the ability for the user, the casino or the lottery to link accounts associated with the registered player, such as player accounts that exist in a player management or player tracking system. The system also provides the capability for the user to indicate other accounts by which they want to link to the online web portal, such as but not limited to cell phone accounts, credit card accounts, and frequent flyer accounts, travel accounts and a multitude of other potential accounts linked to the user. Once external accounts are associated with the system, data can be transferred and analyzed by the online system, or by the external system, to create a much more seamless user experience from the interactive channel to on property engagement. Data gathered and processed from an external system can be used to determine other player preferences, frequency of travel, purchasing habits, and brand affinities. Content can also be made eligible to the user and delivered to the user through the online system, such as but not limited to coupons, offers, a personal calendar, advertising, web applications, win loss statements, gaming history and personalized messages from the gaming establishment or lottery targeted to the player.

[0063] An example process 500 for associating external accounts with an online system for delivering content and tracking content activity is illustrated in FIG. 5. Process 500 begins with registering a user for an account on an on-line

system at **502**. According to one embodiment, the online system is configured to request information from a user regarding any existing external accounts. In some embodiments, the online system can request information from an external source in response to demographic information input into the system. For example, a cell phone number entered into the online system can trigger an inquiry to a cell phone provider to identify and associate external account information with the online account. In another example, during registration the user is prompted to enter external account credentials, for example, a user name and password associated with the cell phone account. The information is stored with the user information so the external associate can be used by the online system.

[0064] In one example, content is provided for delivery to users. The online system can store the content and provide for delivery and/or viewing of the content. However, process **500** includes a step of determining eligibility to receive and/or view the content at **506**. The step of determining eligibility can also include determining if any exclusions apply to the content. For example, users may establish exclusionary criteria that would prevent the content from being displayed. In another example, jurisdictional limitations can prevent display of content and any offers associated with them.

[0065] Once eligibility has been determined, process **500** continues with an identification of a delivery channel at **508** to employ to deliver the content. In one example, identification of the delivery channel can be established by user profile. In another example, the identification of the delivery channel can proceed automatically.

[0066] In one embodiment, the system can calculate a return on investment for the delivery channel and content. Shown for example in FIG. **8** is a visual depiction of a plurality of delivery channels for content and each potential path for delivering content to a user is identified, and based on, for example tracked information the path with the highest return on investment can be identified. In particular, at **801** an SMS offer is transmitted to a user. The user redeems the offer at a website **802**. The offer can indicate that upon on the next visit to a gambling location at which s/he swipes their frequent player card **803**, a credit will be awarded. Having provided an incentive for the user to visit the gambling location and having provided an offer worth some money, the user may spend, for example money, loyalty points, redemption awards, etc. at the gambling location. The amount of money spent can be tracked at **804**. The total spent leads directly to the calculation of the path's ROI. Nodes **810-850** represent suboptimal delivery channels in this example. Nodes **810-850** can take on almost any type of communication vehicle and/or setting and each can be analyzed and compared to determine, in some examples, predictive information tied to ROI, and in other examples historical analysis of ROI, and in yet others a combination of both.

[0067] Returning to FIG. **5**, once the appropriate delivery channel has been selected, the content is delivered using the channel at **510**. Tracking content activity at **512** permits the process to refine for example selection of the delivery channel. Tracked activity can include receipt of the content, access to the content, and subsequent and/or related actions, as discussed in greater detail herein.

[0068] An example system for delivering content, displaying content, engaging player(s), tracking player(s), and for providing feedback is shown in FIG. **1**. The example system can be configured to execute example process **500**.

[0069] Shown in FIG. **1** are various computer implemented components of a content delivery mechanism, where select content is delivered to a patron based, at least in part, on the patron's profile and selection of a delivery channel for the content. A content component retains potential content **102** in a storage medium. In one implementation the content component comprises hardware and software elements for the organization and maintenance of a plurality of content for delivery to a plurality of patrons. The content can be uniquely identified for each item of content that can be delivered. The unique content identifier can be unique for the patron. As discussed in greater detail below the content that can be presented to a patron varies widely. Content can include for example gaming offers **102A**, hotel discounts **102B**, mini applications **102D**. Further the content component can be configured to determine a redemption value associated with any potential content **102**. In one embodiment the content component includes a redemption calculator. In some implementations, the redemption calculator can be a separate component that comprises hardware and software elements. In other implementations, the redemption calculator can be an element of the content component. The content component itself can be hosted on a computer server, can be a computer server with the hardware for executing content management logic, and in some embodiments can be part of a distrusted computing system. In another embodiment, a redemption calculator **102C** can also be content to be delivered to a patron as, for example, an executable program.

[0070] An eligibility component can be configured to control delivery of potential content **102** to a patron. The eligibility component can determine whether criteria is met by a particular patron, and based on the criteria select potential content for subsequent presentation of the content to the patron at **104** by a delivery component. The eligibility component can evaluate a patron profile to determine what content can be delivered to a patron, converting potential content into presented content by communicating the content from the content component to a delivery component **104**. The eligibility component can be integrated with a tracking system that stores information on a patron. The information stored on the patron can include a patron profile **106**. The patron profile can be stored as for example a database, although other computer storage mechanisms can be employed. In one embodiment, a tracking component stores patron profiles in a database. The patron profile can include various forms of information on the patron as discussed in greater detail below. In one example, the patron profile includes demographic information for the patron. In another example the patron profile can include preference information for the patron, and in others delivery channel information and delivery channel preference information.

[0071] The delivery component can be configured to deliver select content to a patron through a variety of communication/delivery channels. Delivery channels can include interactive TV **108A**, cell phone **108B**, smart phone **108C**, computer systems **108D**, or physical locations where content can be received for example, during a casino visit **108E**. The delivery and/or the participation in the patron in content associated activity can be tracked and scored. The scoring **110** can be part of a tracking operation performed by a tracking system that stores the tracked information as well as any scoring derived in a patron profile.

[0072] The tracking system can also be configured to accumulate information on delivered content, actual redemption,

viewing of content, and/or other content associated actions discussed in greater detail below. The tracking system can provide for scoring of the player, the content, and/or the delivery mechanism based on the tracked information including any content associated activity. According to one embodiment, the content delivery mechanism shown in FIG. 1 improves patron profiles based, at least in part, on the measuring and scoring engagement by the patron.

[0073] The user engagement with the delivered content is then tracked and processed by the system. Through external associated accounts and systems, subsequent engagement and actions with related systems is also tracked. Engagement data from the content delivered by the system and engagement with external associated systems can then be processed and analyzed to determine the best users, content and channels for delivering content for achieving core business objectives.

[0074] In one aspect of this invention, the system is operated independently and accessed through public or private networks. For example, the system can operate in a data center and be connected to the public internet or connect to a private or virtual private network or 'VPN'. In one aspect of this invention, the system is operated as a component of another system and accessed through public or private networks. For example, the system may operate as a component of a casino management or lottery VIP player or tracking system. The system in this example can be accessed through the public internet, via the same network the casino management or lottery VIP player or tracking system operates, or via a private or virtual private network or 'VPN'.

[0075] In one aspect of this invention, a user interface or 'GUI' is provided to enable the operator of the online system the ability to manage all aspects of the online system.

Registration, Storage and Management of Accounts

[0076] In one aspect of this invention, user accounts are created and stored in a database. The creation of these accounts can be through actions taken at a point of sale (player club desk, casino or lottery retailer) or actions taken by a player using one or many internet based or interactive registration forms. Shown in FIG. 2 is an example of user account association with an external account. User account association can include cogeneration of user accounts in conjunction with creation of external accounts. For example, when registration for the account 204 occurs through actions taken at a casino player club desk, an interface or process 206 exists between the player club desk, the casino management system (external account systems 202) and the online system to recognize and initiate the creation of the user account in the online system 250. When creation of the account occurs through this interface, the id of the player, as recognized by the casino management system, is communicated to the online system and then tied to the online account as shown by example in FIG. 2.

[0077] In one embodiment, the POS interface 206 is configured to receive an identifier for the player from data server 208 in the external account system 202. The data server 208 can be configured to generate the identifier for a new player or retrieve an identifier from a database 210. In one embodiment, the identifier is the player's account number 212 with the external account system 202. User account association can occur when one or the other of the user account and the external account are preexisting. Further user accounts can be associated with multiple external accounts. The POS inter-

face 206 receives the player identifier, whether new or existing, and communicates it to the online system 250. The online system can be configured to accept the identifier for example using a data server 251. The data server in response to receiving the identifier can query a database 252 for any existing information associated with the identifier. For settings in which the user account does not yet exist, a user account 254 is generated based on the received information, and the external account information is associated. For situations in which the user account is pre-existing, the existing account is associated with the external account.

[0078] In some examples, the external account and the user account can both be pre-existing and the system configured to recognize that an association should be made. The online system 250 is further configured to include a content server 256 and an eligibility server 258 that interact with a web server 260. A user 266 can interact with the online system 250, through a browser program 262 displayed on a host computer 264 to communicate with the web server 260. The web server can be configured to display content from the content server 256 in response to a determination that the user 266 is eligible to view the content by the eligibility server 258. Computer implemented processes for identifying and managing content are discussed in greater detail below. In addition, computer implemented processes for determining eligibility of a user are also discussed in greater detail below.

[0079] In one example, the user 266 can be the same person as the player 204, accessing the online system from a host computer after the point of sale activity that triggered the user account association with the external account has been completed. In another example, when the creation of the user account is through actions taken by the player 366 using internet based registration forms displayed on a browser 362 executed on a host computer system 364 from data obtained from web server 360, an interface or process 306 exists between the online system 350, the casino management system and the player club (example external account systems 302), to a) determine the existence of an account within the casino management system for the user that is initiating the registration b) if an account does not exist, the creation of a new player club account in the casino management system c) communicating the id of that player account, as identified by the casino management system, to the online system, shown by example in FIG. 3.

[0080] Online system 350 is further configured to interact with the external account system 302 through an interface 306. Online system 350 is further configured to process information received from the external account system 302 to associate external accounts with the user account on the online system 350. Online system 350 accesses a user account database 352 through a data server 351. In one embodiment, the database 352 is accessed to determine an account number 354 for the consumer/player 366. The consumer/player's account information can be communicated as part of the POS interface process 306 to determine the existence of an account with the external system. In some examples, multiple communications can be used to verify an account match. In some settings, other information can be transmitted to determine if an account exists for a player on an external account system 302. For example, consumer/player demographic information can be communicated in addition to or instead of an account number.

[0081] External account system 302 receives a request from the online system 350 via interface 306. Data server 308

accepts requests from interface 306, and can execute queries on a database 310 hosted on the external account system to determine if an account exists for the consumer/player 366. In response to a match, the external account system can respond with an account number 312.

[0082] Data server 351 can respond to information communicated by interface 306, by storing association information. In one embodiment, the association information can be stored as part of the consumer/player's account 354. In another embodiment, a player profile can be associated with an account, and the external account association information can be retained as part of the player profile. Player profiles can be employed by, for example, eligibility server 358, to determine what content stored on content server 356 should be presented to the consumer/player 366. The functions and processes for determining eligibility, managing and identifying content, identifying delivery channels, delivering the content, and tracking activity associated with the content, discussed in greater detail throughout the disclosure, can be executed on, for example, online system 350.

[0083] In one aspect of this invention, registration for the account occurs through actions taken at a lottery point of sale.

[0084] For example, an interface or process exists between the lottery point of sale and the online system to recognize and initiate the creation of the user account in the online system. When creation of the account occurs through this interface, the id of the player as recognized by the online system, as well as other attributes associated with the creation of the account, are communicated to the point of sale. The point of sale can then use the unique id for the account, as well as other account attributes and data, to communicate with the online system for account status, profile data and other information and actions related to the account.

[0085] In one aspect of this invention, the account created by the online system represents a lottery VIP club account. For example, the online system can be used to manage aspects of lottery player and VIP clubs, from account registration, login and management, to database marketing, to point-of-sale management and tracking.

[0086] In one aspect of this invention, various security and access credentials, unique and specific to the online user account, are collected from the user and stored on disk or in a database and associated with the user account.

[0087] For example, one, many or a combination of passwords, pins or pass phrases are collected from the user to only allow those who possess those credentials the ability to access the online user account. In one alternative, passwords pins and/or passphrases can be automatically generated. In another alternative, credentials can be stored, for example using smart card technology. These credentials can also be used to encrypt sensitive data related to the user account so that only those who possess those credentials have the ability to read that sensitive data. Those skilled in the art can appreciate the need to collect these credentials to provide the highest level of security expected by consumers and IT professionals. It can also be appreciated that by collecting one, many or a combination of passwords, pins and pass phrases that are unique to the online user account, the system provides a level of user access security on top of the user access security mechanisms employed by account management system current used by casino, lottery and gaming operators.

[0088] In one aspect of this invention, various personal, demographic and preference data is collected and stored on disk or in a database and associated with the user account.

[0089] For example, personal, demographic and preference data may be but not limited to first name, last name, date of birth, address, zip code, sex, income and favorite drink.

[0090] In other aspects of this invention, the personal, demographic and preference data recorded by the system can be an first name, last name, date of birth, address, zip code, sex, income and favorite drink, as well as but not limited to one, many or a combination of:

[0091] a) First name

[0092] b) Last name

[0093] c) Date of birth

[0094] d) Zip code

[0095] e) Phone number

[0096] f) Gender

[0097] g) Marital status

[0098] h) Number of children

[0099] i) Income

[0100] j) Favorite drink

[0101] k) Preferred games

[0102] l) Favorite gaming establishments

[0103] m) Most frequented gaming establishments

[0104] n) Average spend per gaming visit

[0105] o) Bet limits

[0106] p) Inclusion on gaming restriction list

[0107] In one aspect of this invention, the system may collect information related to user preferences for preferred content delivery channels.

[0108] For examples, during the registration process, a user may indicate that they prefer email as the channel of choice. The user may also indicate that they prefer SMS messages for coupons and enter in their cell phone number for delivery.

[0109] In one aspect of this invention, the system may collect information related to user preferences for preferred content delivery.

[0110] For example, a user may "opt-in" to receive email alerts for progressive jackpots values. The user may define criteria, such as max jackpot value, in which the system will then use as criteria when determining eligibility for delivery of that email alert to the user.

[0111] In one aspect of this invention, a method or process, such as collecting an electronic "signature", may be presented to allow the user the ability to assert that the information they are providing is truthful, factual and correct, to their knowledge.

[0112] For example, once the registration for the online user account is complete, the last step presents the user with a checkbox that states "by checking this box I assert that the information I have provided is truthful, factual and correct" and a submit button. If the user checks the checkbox and clicks the submit button, the system records in memory, on disk or in the database that the user has checked the checkbox and associates that state with the user account. This state then can be used to gate access to portions of the system that require that state to be checked. It can be appreciated that this is just one example and that other methods can be used to provide the user the ability to assert that the information they provided is truthful, factual and correct. In one aspect of this invention, user accounts are stored and managed by an external third-party, with the online system managing a replica of that external account.

[0113] For example, a third party system can manage a user account on behalf of the gaming establishment, lottery or lottery point of sale. An interface exists between the online system and the third party system that allows for the replica-

tion of account data between the two systems. The online and external system share unique identifiers to link the account and the account replica. Other data attributes, such as ‘create time’, ‘last update time’ are by the online and external system to keep the replica of the account data up-to-date.

[0114] In one aspect of this invention, user accounts are stored and managed by an external third-party, with the online system only storing a unique reference to the account managed by the third party system. In one example, system **350** of FIG. **3** is configured to retrieve the unique reference from database **352** rather than the account number itself, and retrieve relevant information from the third party system.

[0115] For example, a third party system can manage a user account on behalf of the gaming establishment, lottery or lottery point of sale. An interface exists between the online system and the third party system to construct account operations on behalf of the online system. The online system only stores, in memory, on disk or in a database, a unique reference identifier to the data stored in the external system. During all interface communication, the unique identifier is used to reference particular user accounts, which each user account having its own unique identifier.

Associating Accounts with Online and External Accounts (Casino Management System and Lottery VIP Club and Third-Party Accounts)

[0116] In one aspect of this invention, user accounts **454** are created and stored in a database **452** of an online system **450** shown in FIG. **4**. Once the process of creating these accounts is complete (e.g. as described above), additional external accounts, such as (but not limited to) casino or lottery player club accounts, Facebook accounts, Twitter accounts, email accounts, SMS accounts (cell phone number), loyalty accounts, frequent flyer accounts, frequent traveler accounts, etc., may be associated with the online user account and the id of the player, as recognized by the casino management system from information associated with the external account system (s) **402**.

[0117] For example, user identifiers linking to these accounts, such as username, password, email address, phone number can be indicated by a player either through actions taken on property at the gaming establishment or actions taken with the online system. When a user indicates external account identifiers, such as username, password, unique id, access code, or account key, through actions taken on property at the gaming establishment, an interface exists by which the casino management system, or a subsequent application running on the gaming establishment’s network, enables the user to enter in the account credentials. This application then transmits this data to the online system to then be associated with the online user account. The association can be made through the user or system indicating the online user account credentials, the id of the player as recognized by the casino management system, or both, shown by example in FIG. **4**. When a user indicates external account identifiers through actions taken on the online system, those external account identifiers, for example external account number **406** stored in database **404** of external account system **402**, are associated with the online user account and the id of the player, as recognized by the casino management system and subsequently stored in online system’s database.

[0118] In one aspect of this invention, the online system provides a common interface that enables any external entity, system, network, device or application the ability to either receive data from the online system, or send data to the online

system. In the case where the data is transferred between the online system and an external system, unique attributes of the user account, such as a unique id for example, are used to determine which account the data is associated.

[0119] For example, a member of a lottery VIP club is made eligible for delivery of an online sweepstakes application. The member of the lottery VIP club uses the sweepstakes application to register entries into a drawing for tickets for a Major League baseball game. The lottery, as part of its relationship with the Major League, transmits data to the Major League to communicate data related to the users who have participated in the drawing for the Major League baseball tickets. Conversely, if the Major League conducted a promotion and was able to qualify on their participants as having an interest in the lottery, that data can be transfer to the lottery, through the use of the online system, to create an account or additionally populate or update an existing account’s profile with additional and useful attributes

Managing Exclusions, Imposing Jurisdictional Regulations

[0120] In one aspect of this invention, exclusion lists are loaded and managed by the online system. The system uses data collected from the user as well as data loaded, processed and updated from external associated accounts to match account registrations with individuals listed on one or many exclusion lists.

[0121] For example, a lottery may have a “Voluntary Exclusion List” that is created as people engage with a problem gambling hotline. This list is in place to prevent those with gambling problems from continuing to engage with lottery products. The online system provides an interface by which the lottery can import and update the “Voluntary Exclusion List” with the online system. The list is stored by the online system in memory, on disk or in a database.

[0122] In one aspect of this invention, the online system uses different attributes collected during the online registration process to match the new registration with individual records in the exclusion list managed by the online system.

[0123] For example, a casino may have a list of players that are barred from interacting with the casino (cheaters, problem gamblers, employees, etc). The online system takes attributes collected during the registration process, such as but not limited to first name, last name, address, zip code, phone number, social security number, credit card number, license number, email address, date of birth and national id and matches those attributes with attributes of records on the exclusion list managed by the online system. If a valid match is confirmed, the registration with the online system is not allowed.

[0124] In one aspect of this invention, data loaded, processed and updated from external associated accounts is used to match the new registration with individual records in the exclusion list managed by the online casino.

[0125] For example, data from an account in a casino management system is loaded, processed and updated by the online system and stored in memory, on disk or in a database. Attributes of the data is then used to match the external associated account with individual records in the exclusion list managed by the online system.

[0126] In one aspect of this invention, registrations that match records in the exclusion list can trigger an ‘account review’ state, which notifies the operator of the match. The operator then has the ability to allow or deny the registration,

based on the data collected by the system during the registration process and the exclusion list managed by the online system.

[0127] In one aspect of this invention, import, loading, update and management of the exclusion list is done through a real-time interface between the online system, jurisdictional regulators, the casino, the lottery or gaming establishment.

[0128] For example, a SOAP based interface may exist between the online system and a system sitting in the office of a state regulator or the agency that manages the state’s problem gambling hotline. When an individual is added to the exclusion list as managed by the system sitting in the office of the state regulator or the agency that manages the state’s problem gambling hotline, that new record is transferred via the interface to the online system. The online system recognizes that real-time transfer and stores the new record in the exclusion list in memory, on disk or in a database.

User Managed Profile

[0129] In one aspect of this invention, the online system associates a data profile with the user account, using a unique identifier. The online system then provides a user interface or ‘GUI’ to enable the user the ability to add, edit and manage data attributes associated with the profile and user account.

[0130] For example, the user can add a profile photo by interacting with the user interface and uploading a photo from their pc, pda, cell phone, or electronic device.

[0131] In another example, the user can add generic profile data that can later be loaded for use by external associated accounts.

[0132] For example, the system would allow a casino player the ability to set their on-property preferred preferences, such as preferred drink when playing, favorite restaurants, shows, preferred slot club hosts, preferred sports teams, etc. This data can then be loaded by the external casino management system or transferred to the casino management system by the online system and be used to greatly enhance the on-property experience and make it as comfortable as possible. Tailoring the experience to the player and making them as comfortable as possible is critical in retaining customers and attracting new players.

[0133] As another example, player of a casino or lottery can pre-define gaming day ‘limits’. They can set limits per any quantum or delta, such as but not limited to per visit, per session on a game device, per minute, per hour, per day, per week, per month or per year.

Registration, Storage and Management of Delivery Channels

[0134] In one aspect of the invention, delivery channels are stored by the online system on disk or in a database and are associated with a combination of identifiers. These identifiers allow for the delivery channels to be classified and subsequently retrieved by the online system when needed.

[0135] For example, a unique identifier is associated with the delivery channel to distinguish the delivery channel uniquely from other delivery channels stored by the system. Other identifiers, such as but not limited to delivery channel type, creation time, updated time, description, category, tags, keywords, size, url, domain name, email list address, forum name, administrator, administrator contact, and format is also stored to allow for the delivery channel to be identified. The online system may also associate the unique delivery channel

identifier with one or many unique content identifiers to indicate which content the delivery channel supports or allows.

[0136] In one aspect of this invention, delivery channels constitute any medium by which data can be presented to a player.

[0137] For example, an email service provider, an email address, cell phone carrier, cell phone number, and electronic billboards are delivery channels. In other aspects of this invention, the delivery channels identified by the system can be an email service provider, an email address, cell phone carrier, cell phone number, electronic billboard, as well as but not limited to one, many or a combination of:

- [0138] a. An email service provider
- [0139] b. An email address
- [0140] c. A phone carrier
- [0141] d. A home phone number
- [0142] e. A business phone number
- [0143] f. An automated calling and telemarketing system (“robo-dialing”)
- [0144] g. A cell phone carrier
- [0145] h. A cell phone number
- [0146] i. An electronic billboard
- [0147] j. Online advertising
- [0148] k. Online advertising networks
- [0149] l. A blog
- [0150] m. A blog network
- [0151] n. A Facebook page
- [0152] o. A Facebook account
- [0153] p. A MySpace page
- [0154] q. A MySpace account
- [0155] r. A Twitter page
- [0156] s. A Twitter account
- [0157] t. A billboard
- [0158] u. A classified ad
- [0159] v. A classified advertising network
- [0160] w. An online classified advertising network
- [0161] x. An advertising network
- [0162] y. An advertising agency
- [0163] z. A brochure
- [0164] aa. A postcard
- [0165] bb. A website
- [0166] cc. A webpage
- [0167] dd. A personal webpage that requires login by the user
- [0168] ee. An electronic device
- [0169] ff. A wireless device
- [0170] gg. A wireless device running in a private network
- [0171] hh. A usb based device
- [0172] ii. A mobile phone
- [0173] jj. A ‘PDA’ device
- [0174] kk. A web browser
- [0175] ll. A web browser ‘toolbar’
- [0176] mm. A point-of-sale device
- [0177] nn. A point-of-sale display
- [0178] oo. A web application
- [0179] pp. A ‘Flash’ application
- [0180] qq. In game advertising
- [0181] rr. ‘LED’ display
- [0182] ss. Electronic billboard
- [0183] tt. Electronic display
- [0184] uu. Integrated electronic display
- [0185] vv. Interactive electronic touch screen display
- [0186] ww. Television
- [0187] xx. Interactive Television

[0188] In one aspect of this invention, operators may be associated with delivery channels, linked by unique identifiers and stored on disk, in memory, or in a database.

[0189] For example, Lottery A may be associated with Email, SMS, Twitter and Facebook while Casino B may be associated with Email, Twitter and MySpace.

Registration, Storage and Management of Content

[0190] In one aspect of the invention, content is stored by the online system on disk or in a database and is associated with one or a combination of identifiers. These identifiers allow the content to be classified and subsequently retrieved by the system when needed.

[0191] For example, a unique identifier is associated with the content to distinguish the content uniquely from other content stored by the system. Other identifiers, such as but not limited to content type, creation time, updated time, description, category, tags, keywords, url, size, and format is also stored to allow for the content to be identified. The online system may also associate the unique content identifier with one or many acceptable delivery channel identifiers to indicate which channels for which the content format is compatible and deliverable. Different channels can also be associated with an order of preference. The content can be checked against the 1st preferred delivery channel to determine if delivery is appropriate, and if not the next delivery channel can be checked and so on. Players can establish designations for each channel, in one example in a player profile, that provide for alternative delivery mechanisms as well as delivery through multiple channels

[0192] In another aspect of this invention, the content identified by the system is, but not limited to, static content.

[0193] For example, static content can be commonly described as text, html pages, graphics in common formats (jpg, gif, png, pic, bmp, raster, vector, etc), web pages, etc.

[0194] In another aspect of this invention, the content identified by the system is, but not limited to dynamic content.

[0195] For example, content may be user-specific personalized messages that included data about the user, such as a birthday message that include the user's first name and age. This data may be pre-generated as part of a human-initiated process, or generated in real time by a set of software routines using data stored in memory, on disk or in a database.

[0196] In one aspect of this invention, a "template" language exists to describe how particular user-specific data can be included in content that exists in memory, on disk or in a database.

[0197] For example, it can be appreciated by those who are skilled in the art that there are many different ways to define replacement nomenclature for user-specific data. Character-based "tags" may be used to identify where in a document, for instance, a replacement may take place. Characters that can be used to delimit the starting and ending elements of standard replacement "tags" can be, but are not limited to, braces, brackets, semicolons, namespaces and other character-based identifiers. An example where braces are used to define where user-specific data is replaced for "first_name" can be "[replace:first_name]".

[0198] In one aspect of this invention, the content can be an application that runs on a personal computer, mobile application, script or "web-based" software application.

[0199] For example, content may be but not limited to an Adobe Flash application. In other aspects of this invention,

the content identified by the system can be an Adobe Flash application, as well as but not limited to one, many or a combination of:

- [0200] a. Adobe PDF application
- [0201] b. Web application
- [0202] c. JavaScript application
- [0203] d. "AJAX" application
- [0204] e. HTML Application
- [0205] f. WAP Application
- [0206] g. MMS Application
- [0207] h. SMS Application
- [0208] i. iPhone Application
- [0209] j. BREW Application
- [0210] k. J2ME Application
- [0211] l. J2EE Application
- [0212] m. Java Application
- [0213] n. PHP Application
- [0214] o. Python Application
- [0215] p. C/C++ Application
- [0216] q. C# Application
- [0217] r. Visual Basic Application
- [0218] s. Microsoft .NET Application
- [0219] t. Google Gears Application
- [0220] u. Facebook Application
- [0221] v. Compiled Application
- [0222] w. Downloadable Application

[0223] In one aspect of this invention, the content identified by the system is, but not limited to, an offer, voucher, or coupon. In other aspects of this invention, the content identified by the system can be an offer, voucher or coupon, as well as but not limited to one, many or a combination of:

- [0224] a. A text message
- [0225] b. A HTML Message
- [0226] c. An email
- [0227] d. A SMS message
- [0228] e. An offer
- [0229] f. A voucher
- [0230] g. A coupon
- [0231] h. A barcode
- [0232] i. An image
- [0233] j. Questionnaire application
- [0234] k. Quiz application
- [0235] l. Personal Rewards Points display application
- [0236] m. Personal Jackpot counters and displays (games played by the player)
- [0237] n. Generic Jackpot counters and displays (all games)
- [0238] o. Personal and general sweepstakes status displays
- [0239] p. Personal contest leader boards (contests engaged by the player)
- [0240] q. Generic contest leader boards (all contests)
- [0241] r. Personal (targeted) and general calendar
- [0242] s. Personal (targeted) advertising displays
- [0243] t. Personal rewards calculator that indicates when rewards are achieved next
- [0244] u. Video display application
- [0245] v. Video streaming application
- [0246] w. Live video streaming application
- [0247] x. Video conferencing application
- [0248] y. Generic rewards calculator
- [0249] z. Personal diary
- [0250] aa. Personal room reservation information (status, price, etc)

- [0251] bb. Room reservation application
- [0252] cc. Personal event reservation and ticket information (status, price, etc)
- [0253] dd. Event reservations and ticket purchase application
- [0254] ee. Travel reservation and ticket purchase information (status, price, etc)
- [0255] ff. Travel reservations and ticket purchase application

[0256] In one aspect of this invention, the content identified by the system may not reside on the online system but reside on a system external to the online system. When content identified by the system resides on an external system, identifiers and instructions are stored on the online system that indicate how to identify, access, load and deliver that content.

[0257] For example, content such as a game application, may reside on an external system's website. In this instance, the url, html embed tag code and instructions for loading, launching and running the game application are stored by the online system in memory, on disk or in a database.

Loading and Update of Account Data

[0258] In one aspect of this invention, user accounts are created and stored in a database. Once the process of creating these accounts is complete (e.g. as described above), additional external accounts can be associated with the online user account and the id of the player, as recognized by the casino management system. According to one embodiment, once the process of associating these additional external accounts is complete, data from these accounts can be loaded, processed and stored on the online system.

[0259] For example, a casino or lottery player club account can be associated with the user account and stored by the online system in memory, on disk or in a database. In another embodiment, once the account has been associated with the online system, the account credentials can then be used to load information from the external account.

[0260] In one aspect of this invention, the account credentials are used the load data through an interface established between the online system and the system that manages the external account.

[0261] For example, a SOAP based interface can be used to request account data by the online system from a casino management system. When the casino management system receives a request for data related to the external account, the data is then transferred from the casino management system to the online system, stored in memory, on disk, or in a database and is associated with the online user account and the id of the player, as recognized by the casino management system. Account data transferred from the casino management system to the online system can be, but is not limited to, last gaming day, date of birth, status, points, assigned offers, assigned coupons, personal calendar, favorite games, games most played, player classification, player tier, first name, last name, gender and address. Any transfer of data through an interface between the online system and the casino management system may include industry standard and well accepted security measures to insure that the transfer of the data is secure.

[0262] In one aspect of this invention, various different types of interfaces are provided to transfer, load, and process data.

[0263] For example, an "FTP" (File Transfer Protocol) module is provided as an interface for the transfer, loading

and processing of data. Protocols, systems, modules, applications and processes also provided as an interface can be, but are not limited to:

- [0264] a. A flat text file
- [0265] b. An "FTP" (File Transfer Protocol) module
- [0266] c. INI
- [0267] d. XML
- [0268] e. SOAP
- [0269] f. TCP/IP
- [0270] g. HTTP
- [0271] h. HTTPS
- [0272] i. A database
- [0273] j. MYSQL DB
- [0274] k. POSTGRES SQL DB
- [0275] l. ORACLE DB
- [0276] m. DBASE
- [0277] n. Progress DB
- [0278] o. Access DB
- [0279] p. A Relational Database
- [0280] q. A hard disk drive
- [0281] r. Electronic memory
- [0282] s. Flash memory device
- [0283] t. USB memory device
- [0284] u. External memory device
- [0285] v. CD-ROM disk
- [0286] w. Floppy disk
- [0287] x. Tape based magnetic medium

[0288] In one aspect of this invention, data loaded and processed from these external accounts through an interface, can be periodically checked, loaded or updated to keep the data stored in the online system up to date with the data stored in the external account's management system.

[0289] For example, an interface request can be made by the online system to an external system, such as a casino management system, to request updated data on a particular user id. Because the online system links online user accounts to the id used by the casino management system to identify the player in the casino management system, any requested data can be identified, fetched and then transferred to the online system.

[0290] In one aspect of this invention, data loaded, processed and updated from these external accounts is done using a queuing system.

[0291] For example, the online system may identify, through some process (such as user interaction, a schedule, or the change in other user account identifiers and attributes) that external account data needs to be updated. The online system will then "queue" a request for that data in a list. Based on a pre-defined schedule or when the system can determine there are adequate and available resources, the "queue" of requests is processed from first to last and the system initiates the necessary requests to the external account management system to update the external account data.

[0292] In one aspect of this invention, data loaded, processed and updated from these external accounts is done in real time.

[0293] For example, the online system may identify, through some process (such as user interaction with the system) that external account data needs to be updated. The online system will then initiate a request for that data by initiating the necessary requests to the external account management system to update the external account data. In another example, data loaded, processed or updated in real time can be used to prevent players from exceeding gaming

“limits” set by the player or by the online system. As an external account system (casino management system or lottery point of sale) is monitoring play by a player on a gaming device, it can transfer the amount of credit purchased or bet by the player within a particular delta, such as minute, hour, day, week, month, as each transaction takes place. The online system then has the ability to do one, multiple or a combination of, but not limited to, the following actions:

- [0294] a. Deliver message content to the device display informing the player that they have exceeded their pre-set limit.
- [0295] b. Deliver application content to the device to require the player to agree, but pressing performing a sequence of device inputs, that they are exceeding their pre-set limit on each subsequent bet
- [0296] c. Shut of or “hold” any external or associated account connected to cashless wagering (such as player card, debit card, credit card or ATM card).
- [0297] d. Deliver message content to the device to display that the casino is being notified that they have exceeded their pre-set limit.
- [0298] e. Notify the operator that the player has exceeded their limit
- [0299] f. Notify any pre-set “contacts”; people indicated by the player who should be contacted in the event their pre-set limit has exceeded.
- [0300] g. Inform the external system to limit and block additional play

[0301] In one aspect of this invention, data loaded, processed and updated from these external accounts is initiated by the external account management system.

[0302] For example, through some process as determined by the external account management system, data is transferred to the online system through an interface. This data can be transferred in “batch”, meaning multiple records at a time, or in real time per-user-account.

[0303] In one aspect of this invention, how data will be loaded, processed and updated from these external accounts is stored in memory, on disk or in a database.

[0304] For example, casino management system “A” may only allow data to be loaded, processed and updated by it initiating a connection to the online system’s FTP component and it transferring that data in a “batch” format. In another example, casino management system “B” may prefer data to be transferred in real time, using a SOAP protocol, with requests for data being initiated by the online system.

[0305] In one aspect of this invention, data associated with the user account on the online system may be valuable to the system that manages the external account, requiring that the online system update the external account management system on a periodic basis.

[0306] For example, the online system may associate gaming-day “limits” with the online user account. For the sake of this example, these “limits” are numerical values that describe the absolute maximum amount of money the user wishes to be allowed to gamble within any particular 24 hour period. The gaming-day “limits” may be indicated by the user or by the system based on other data associated with the user account, such as inclusion on a problem gambling list, user debt data, or jurisdictionally imposed rules and regulations. Based on a schedule or other process, the online system uses an interface to establish a connection with, for example, a casino management system. Based on the id stored in the online system and recognized by the casino management

system as linking the player to a player account record, the online system submits the updated data associated with the online user account. For the sake of this example, the gaming-day “limits” are transferred from the online system to the casino management system, stored and associated with the player account records, as indicated by the id stored in the online system and recognized by the casino management system as linking the player to the player account record.

Processing of Account Data

[0307] In one aspect of this invention, user accounts are created and stored in a database. External accounts can be associated with the online user account and the id of the player, as recognized by the casino management system. Data from these external accounts can be loaded, processed and stored on the online system. Once stored on the online system, either in memory, on disk or in a database, the online system can then process the data based on the format and amount of data stored on the external account.

[0308] For example, the external account can be a player account in a casino management system. Once the player account is associated with the online account, the system can then process particular attributes of the external account, such as but not limited to last gaming day, number of visits to the property, amount spent per visit, all games played, all gaming days, etc. The system can process the account by either using the account credentials indicated by the user to log into the account through an interface that would normally be available to players, through an API (Application Programming Interface) provided by the casino management system, or through a different interface, such as a XML, SOAP, or TCP/IP interface. The data extracted and processed can then be stored on the online system, either in memory, on disk or in a database and subsequently used to indicate and record user preference, such as likes, dislikes, gaming affinities, value as a player, as well as frequency of gaming.

[0309] In another example, the external account can be a Facebook account. Once the Facebook account is associated with the online account, the system can then process particular attributes of the external account, such as but not limited to friends the account is associated to, groups the account belongs to, text in the posts related to account status updates, etc. The system can process the account by either using the account credentials indicated by the user to log into the account, or through an API (Application Programming Interface) provided by the external account management system. The data extracted and processed can then be stored on the online system, either in memory, on disk or in a database and subsequently used to indicate and record user preferences, such as likes, dislikes, brand affinities, travel destinations, most discussed topics, as well as demographic information.

Loading, Updating, Processing and Management of External Data

[0310] In one aspect of this invention, data external to the online system can be loaded, processed, stored and managed by the online system. This data can then be used by this system in various aspects described by this invention, such as content management, eligibility and delivery.

[0311] For example, progressive jackpots are used in both the casino and lottery industry. The online system can load, process and manage progressive jackpot data that is provided through a common interface. Once the data has been pro-

cessed, thresholds for progressive jackpot values can be set by users and stored as attributes of their user profiles. The system can recognize that a threshold specified by a user and stored as an attribute of their profile, has been reached. The system can then make that user eligible to receive an email notifying them of this event and then delivery that email.

[0312] In one aspect of this invention, data associated with a particular delivery channel is loaded and stored in the online system.

[0313] For example, advertising schedules related to radio advertising can be stored and managed by the system.

[0314] In one aspect of this invention, data associated with particular real-time delivery channels, networks, systems and devices, is loaded and stored in the system.

[0315] For example, modern technology allows for various network attributes and consumer-level devices, such as home PCs, USB devices, PDAs, ip addresses and cell phones, to determine the user's geo-location. This data can be loaded, processed and updated by the system and stored in memory, on disk or in a database. Once managed by the system, geo-location can be used in various aspects of the system, such as content eligibility, content delivery, as well as gating user access to the system.

[0316] In one aspect of this invention, geo-location can be used to gate user access to the system.

[0317] For example, once geo-location is loaded, stored and managed by the system, that data can be used to determine whether or not the user is allowed to register for or access a user account.

Content Eligibility

[0318] In one aspect of this invention, all users who have the capacity to receive or view content that is stored in the system, must be recorded as being 'eligible' to receive or view that content. User eligibility can be stored by the system in memory, on disk or in a database.

[0319] For example, if a user is to receive an offer or coupon through a particular delivery channel, they must be marked as eligible to receive that particular offer or coupon.

[0320] Shown in FIG. 6 is a logic flow associated with determining eligibility for content driven by measurable activities linked to player identity. At **602**, measurable activities (e.g. on property play, web participation, content viewed/clicked etc, redemption of points, behavior, visits frequency purchases, etc.) are tracked by a content delivery system. The measurable activities are uniquely associated with a particular player identify at **604**. The association can be determined from, for example, web profiles, player club account, Facebook profile, phone number, credit card number, address, amongst other information. The system provides for content delivery at **606** to the identified players and may further provide for customization of content on the basis of content display at **608**. For example, scaling can be performed to tailor delivered content to the delivery channel being employed. In one aspect of this invention, eligibility to receive or view content is defined by characteristics of the user's profile. For example, current latitude and longitude are two possible attributes of the user's profile. Based on these two attributes, the system can determine eligibility based on the current geo-location of the user. The system can also use these two attributes to determine the user's current position in relation to a point of sale. For instance, if the user is within 10

miles of a lottery point of sale, the system can make the user eligible for an SMS-based coupon for '1 free \$2 scratch ticket'.

[0321] In one aspect of this invention, eligibility to receive or view content is defined by characteristics of the user's profile scored through predictive analytics, regression tests, behavioral analysis, and/or preferences indicated by the user.

[0322] For example, a user registering with the online system may not have an external associated account. In this case, predictive analytics is used to determine the best coupon to present to the user to incentivize redemption at the point of sale.

[0323] In one aspect of this invention, eligibility to receive or view content is defined by characteristics of the user's profile, data loaded, processed and updated from one or many external associated accounts, or both.

[0324] For example, a casino management system may associate a gaming 'tier' to a player record that indicates the value of that player to the casino. Once a user account is created in the online system, the player account in the casino management system is registered as an associated external account and the account data associated with the external account has been loaded and processed by the online system, the gaming 'tier' can be used to indicate eligibility for a particular user or set of users to receive and view content stored by the system. Other examples of user profile characteristics that can be used to determine eligibility to receive or view content are:

[0325] a. Player Tier

[0326] b. Player demographics

[0327] c. Distance from a particular geo-location

[0328] d. Gaming affinities

[0329] e. Previous interaction online or at property

[0330] In one aspect of this invention, eligibility to receive or view content is defined by jurisdictionally imposed gaming rules and regulations.

[0331] For example, a gaming jurisdiction may have regulations related to the type of marketing materials particular individuals can received. Some jurisdictions may impose rules that say marketing materials related to gaming cannot be sent to individuals that have previously be registered on a problem gambling exclusion list.

[0332] In another example, a gaming jurisdiction may have regulations that individuals can only receive a particular amount of free slot play during a given month. The system will then record the amount of free slot play delivered, receive and redeemed by the player and then use that information to manage the eligibility for the delivery of future free slot play coupons to the player.

[0333] In one aspect of this invention, eligibility to receive or view content is defined by a set of rules.

[0334] For example, some content may require the user to opt-in for the receipt of that content. A rule can dictate that all users that have not opted-in to receive a particular set of content are not eligible to receive that content. A user may have opted-in to receive progressive jackpot alerts via email when the jackpot reaches a particular threshold, as defined by the user during or after account registration and associated with their user account in the system.

[0335] In one aspect of this invention, eligibility to receive or view content is defined by the receipt or view of previously delivered content.

[0336] For example, if previously delivered content, such as a coupon or offer, has been viewed, printed and redeemed

within pre-defined period of time, a user may be made eligible for a subsequent set of coupons or offers.

[0337] In one aspect of this invention, eligibility to receive or view content is defined by a fixed schedule.

[0338] For example, a general calendar of events at a gaming establishment may have Double Points Tuesday every Tuesday between July 1st and September 1st. Thus, users are made eligible to receive or view content advertising “Double Points Tuesday” during and around that period of time, as defined by a schedule.

[0339] In one aspect of this invention, eligibility is defined by a matrix, sequence and schedule that can associate user actions, external events and interactions to eligibility for one, many or a combination of content elements.

[0340] For example, the operator can define that for ‘tier 1’ players, if they view and then redeem a ‘\$20 in free slot play coupon’ within 24 hours of receiving the coupon, then they are made eligible for a ‘free buffet coupon’. If the ‘free buffet coupon’ is redeemed within a 1 week period and the player subsequently spends more than \$100 on the proper during the visit in which that coupon is redeemed, then the player is made eligible for a ‘\$50 free slot play coupon’.

[0341] In one aspect of this invention, eligibility is fixed and hard-coded by the operator of the online system, based on a unique identifier that can identify the user account or by a unique identifier that can identify a related external account.

[0342] For example, the operator of a casino can set eligibility based on the username set by the player during registration with the online system or based on the id used by the casino management system to uniquely identify player.

[0343] In one aspect of this invention, eligibility is based on previous interaction online or at the gaming establishment.

[0344] For example, previous interactions with a particular gaming machine that has a progressive jackpot can make the user eligible to receive jackpot email and SMS alerts for that particular gaming title. Previous interactions online or at the gaming establishment may be defined as, but not limited to:

[0345] a. Groups that player belongs to online

[0346] b. Websites frequented

[0347] c. Social networks

[0348] d. Games played in the past online

[0349] e. Games played at the property

[0350] f. Events attended

[0351] g. Travel

[0352] In one aspect of this invention, a user interface or ‘GUI’ is provided to enable the operator of the online system the ability to manage delivery eligibility.

Selection of Content Type for Delivery

[0353] In one aspect of this invention, content is selected by the system for delivery to particular users within the system based on a list of available content, events and a list of eligible recipients, stored in memory, on disk or in a database.

[0354] For example, the system may query the database for a list of eligible recipients for a coupon or offer to be delivered by the system.

[0355] In one aspect of this invention, content is selected by the system for delivery to particular users within the system based on an event external to the system.

[0356] For example, the system is monitoring progressive jackpots on the gaming property and the jackpot has exceeded \$10,000. The system may query the database for a list of eligible recipients for a progressive jackpot alerts. Based on users who have “opted-in” to receive alerts when the jackpot

exceeds \$10,000, the system then selects the appropriate content related to the progressive jackpot alert for that game, makes the appropriate users eligible to receive that content and then prepares it for delivery to these users.

[0357] As another example, the system is monitoring the value of a “Mega Millions” or “Powerball” lottery jackpot and the jackpot has exceeded \$10,000,000. Based on users who have “opted-in” to receive alerts when the jackpot exceeds \$10,000,000, the system then selects the appropriate content related to the progressive jackpot alert for that game, makes the appropriate users eligible to receive that content and then prepares it for delivery to these users. In one aspect of this invention, content is selected by the system for delivery to a particular user within the system based on an event related to the user’s profile.

[0358] For example, the date of birth associated with a user record can indicate that today is the user’s birthday. The system then selects the ‘birthday’ coupon for delivery to the user.

Scaling and Pre-Rendering Content for Delivery

[0359] In one aspect of this invention, content is scaled and pre-rendered to prepare that content for delivery in one, many or a combination of delivery channels.

[0360] For example, an image may contain text but in raster form. The text is extracted from the image and rendered as a character-based text file to be compatible for delivery to an SMS device.

[0361] In one aspect of this invention, content is scaled and pre-rendered to prepare that content for delivery, based on channel attributes.

[0362] For example, a delivery channel is stored in the system and an image is being prepared for delivery in that channel. Attributes related to acceptable image width and height are stored and associated to that delivery channel as an attribute of the delivery channel. The image is larger than the acceptable width and height stored as an attribute of the channel, so the system then scales that image accordingly.

[0363] In one aspect of this invention, 3d content can be scaled and pre-rendered in 2d to support channels and devices that do not support 3d content.

[0364] In another aspect this invention, content is scaled and pre-rendered to prepare that content for delivery, based on a destination device, network or application.

[0365] For example, a cell phone may only accept a specific SMS character limit. So, the system scales a coupon’s messaging to fit within that character display limit. Other examples of devices, networks or application for which content can be scaled and pre-rendered, but not limited to the following devices, networks or applications:

[0366] a. Cellphone

[0367] b. PDA

[0368] c. Webpage

[0369] d. Flash application

[0370] e. Email client

[0371] f. SMS device

[0372] g. Online Competition

[0373] h. Multiplayer Online World

[0374] i. Slot-top electronic display

[0375] j. Slot machine display with touch screen display

Delivery of Content

[0376] In one aspect of this invention, content is delivered through a channel and or to an eligible user once that content has been selected, scaled and pre-rendered for delivery.

[0377] For example, a player visits a casino's website and logs in to their user account using the account credentials they indicated during account registration with the system. For the sake of this example, they are logging into a delivery channel identified by the system as the 'personal player page'. Also in this example, account credentials can be indicators such as email address and password to gate access to the 'personal player page' and determine which user for which the page will be rendered. Once the account indicators have and authenticated, the system then checks for content that he user is eligible to receive through the 'personal player page' channel. For the sake of this example, the player is eligible for a personalized 'general manager's letter', offers, a personalized calendar, jackpot meters and a graphical display of the number of loyalty points they have associated with their account. The system then prepares the content the user is eligible for, does any required scaling and pre-rendering of the content for delivery to the player and then delivers the content to the 'personal player page' channel by rendering the page.

[0378] As an additional example, if according to the system the player is eligible to receive an offer and coupon for \$20 in free slot play through the 'personal player page' channel, the content for an offer and coupon is fetched from the system, scaled and pre-rendered for delivery and then delivered to the player through the rendering of the personal web page.

[0379] In one aspect of this invention, a user interface or 'GUI' is provided to the operator for management of content delivery.

Effective Channel Selection for Delivery

[0380] In one aspect of this invention, delivery of content through a one, many or a combination of delivery channels can be determined by the system based on a variety of events, factors and/or attributes.

[0381] In one embodiment, channel selection can be based on personal preference, either dictated by the user or based on preference derived from the loading and processing external associated accounts.

[0382] For example, a during online account registration a user may indicate that they prefer to receive offers and event information from a casino exclusively through their email and SMS accounts. In one embodiment, the system and/or external systems can determine an appropriate channel based, at least in part, on external information. For example, geo-location systems can indicate that a player's location is changing, suggesting the player is accessing content from a mobile location. Delivery to the player's cell phone can be made the primary delivery mechanism for this circumstance. Selected delivery channel can be adjusted based, at least in part, on location determination. In one example, eligible content can include content for casino's and/or lottery locations in Las Vegas and Atlantic City. Geo-location information indicates that the player is in Las Vegas, therefore, the content delivered can be filtered to exclude content associated with Atlantic City.

[0383] In one aspect of this invention, the system may track engagement with previously delivered content and determine

that channel selection can be based on the success of previous engagement with that delivered content.

[0384] For example, the system can track that coupons delivered through email have a far greater percentage and frequency of redemption than coupons delivered through Facebook. This measurement is then stored in memory, on disk or in a database and associated with the user account that was delivered the content.

[0385] In one aspect of this invention, channel selection may be based on user profile elements.

[0386] For example, the user profile is associated to an account in a casino management system. Based on the loading, processing and updating of this external account data, as described above, the system can identify when a player is playing a particular game in a gaming establishment. The system can select the gaming machine they are playing at as the delivery channel for an application that will render '200 credits in online BonusPlay coupon' with instructions on how they may print that coupon.

[0387] In one aspect of this invention, channel selection may be based off of external associated accounts.

[0388] For example, a user may have an account with a credit card that offers travel rewards. Once this account has been identified by the online system as being associated to the user, offers and coupons for the gaming establish may be delivered through channels provided by the credit card management system, such as email blasts sent on a monthly basis to an email address associated with the credit card.

[0389] In one aspect of this invention, channel selection may be hard-coded by the operator.

[0390] For example, the operator may select that they want all '\$20 free slot play' coupons to be exclusively delivered via email.

[0391] In one aspect of this invention, channel selection may be based on a schedule.

[0392] For example, the operator may select that they want all '\$20 free slot play' coupons to be delivered via email on Tuesdays and Thursdays and via SMS all other days.

[0393] In one aspect of this invention, channel selection may be based on a set of rules related to one, many or a combination of delivery channels and the content to be delivered in that channel.

[0394] For example, Google does not allow the delivery and display of advertising related to the gaming aspect of a casino or lottery, but will allow advertisements for hotel rooms, events and resorts. The system can recognize this and not deliver advertising related to the gaming aspects of a casino or lottery through channels related to or operated by Google.

[0395] In one aspect of this invention, channel selection may be based on jurisdictionally imposed rules and regulations.

[0396] For example, a specific gaming jurisdiction may impose a rule that only allows gaming establishments the ability to deliver free slot play through post cards and personal web pages, but not through email, SMS, Twitter, Facebook, etc. The system can recognize this and only deliver free slot play through channels related to post cards and personal web pages.

[0397] In one aspect of this invention, channel selection is based on a script that dictates a sequence of channels and content to be delivered in those channels.

[0398] For example, the operator may want to script a set of offers to be delivered to a player over time, but may not want

all of the offers to be delivered through the same delivery channel. Thus, they can create a script that is interpreted by the system to dictate the channels to be used by the system for delivery of offers over time. For example, offer 'A' is delivered through email on Monday and then offer 'B' is delivered through SMS on Thursday of the same week.

[0399] In one aspect of this invention, a user interface or 'GUI' is provided to the operator for management of channel selection.

Measuring Deliverability and Receipt of Content Delivered

[0400] In one aspect of this invention, the online system measures the deliverability of the content delivered, the delivery channel and the receipt of that content.

[0401] For example, the system delivers a '\$20 in free slot play' HTML email message to a particular channel, such as a user's email address. If the receiving email server does not exist or if the server exists and it responds to the online system that it was unable to deliver the email due to a non-existent email address, the system stores this information. The email address as a channel for content delivery is marked as invalid by storing a state in memory, on disk or in a database and associating that state to the user account record and the delivery channel. This state can then be used when the system is determining effective delivery channels for content.

[0402] In another example, the content being delivered may have a higher deliver rate within one, many or a combination of channels than other content being delivered.

[0403] For example, a text email message may be measured by the system as having a higher rate of opens and views by users than HTML email messages. The system stores this as a state in memory, on disk or in a database and associates that state to the content being delivered, the user and/or the channel used for delivery.

Tracking Engagement with Delivered Content

[0404] In one aspect of this invention, unique identifiers are used to associate the online account with external associated accounts, such as player accounts that exist in a casino management system. These unique identifiers are used to then track engagement with content delivered to a user of the online system.

[0405] In one example, an html email is delivered to a user of the online system. Common interfaces and methods are used, such as 'tracking pixel', to determine that the email is opened. The 'url' to a webpage is included in the email. Tracking 'urls' can be used to determine that the 'url' included in the email was clicked by the user. The system can measure the amount of time between when the email was 'opened' and when the tracking 'url' was clicked. This time can be stored in memory, on disk or in a database and associated to the user and the content, delivery channel for later analysis and use. Tracking pixels and tracking urls can be used to measure engagement, as well other methods. These methods can include tracking pixels and tracking urls, but also can include, as but not be limited to:

- [0406] a. Urls
- [0407] b. Urls clicked
- [0408] c. Web pages visited
- [0409] d. Tracking pixels
- [0410] e. Tracking urls
- [0411] f. Javascript embedded in web pages
- [0412] g. Flash applications embedded in web pages
- [0413] h. Scan of player card id by a device or system

[0414] i. Scan of coupon connected to online user or player card id

[0415] j. Use of credit card associated with online account at a gaming establishment

[0416] k. Scan of player card at gaming device

[0417] l. Data collected by third-partying applications, networks and devices

Tracking of Subsequent and Related Actions

[0418] In one aspect of this invention, the system tracks engagement through and across one, many or a combination of content, delivery channels and calculates the best and most successful combination and sequence.

[0419] For example, the system may track the engagement and subsequent actions taken by the player, starting with a particular coupon delivered to users through text emails versus coupon delivered to users through Twitter or Facebook. The system then stores the results of that tracking in memory, on disk or in a database for use in determining effective channel delivery, or other analysis and use.

[0420] In one aspect of this invention, the online system uses data loaded, processed from external associated accounts to track subsequent and related actions.

[0421] For example, there is a significant amount of rich data that can be derived from point-of-sale systems and transactions related to the online user and/or external associated accounts.

[0422] The system can determine retail purchase habits by linking the redemption of a sweepstakes coupon at specific retailer. If a credit card used in the same transaction or visit, that can also be stored by the online system to extract further data about purchase history, affinities and habits.

[0423] In one aspect of this invention, the online system in integrated with third party networks, applications and devices to enable the online system to track subsequent and related actions taken by a user.

[0424] For example, it is common for systems such produced and managed by TravelClick, Ticketmaster, Expedia, Bally, IGT, Aristocrat, WMS, Konami, GTECH, Scientific Games, or systems such as lottery 'on-line', scratch ticket, retail point of sale (POS), coupon redemption, promotional management, player tracking and hotel/travel booking engines to offer interfaces to extract and measure user engagement with their systems. Data related to this engagement can be loaded, processed and associated to user accounts in the online system, based on unique identifiers stored in the online system and the external systems. In addition, content delivered through Twitter vs. content delivered through email may be tracked as follows:

[0425] Message Sent Via Twitter:

[0426] Player engaged, clicked on url

[0427] Logs into website, identifies as player

[0428] Interacts with coupon

[0429] Prints coupon

[0430] Player visits casino within 2 weeks

[0431] Redeems coupon

[0432] Plays game, spends \$20

[0433] Message Sent Via Email

[0434] Email viewed

[0435] Player visits casino within 24 hrs

[0436] Swipes card, redeems offer

[0437] Plays game, spend \$100

[0438] Per this example, the system records the various attributes and data points related to the engagement with the

content and subsequent and connection events and actions. Attributes such as action, events, sequence of actions, time of events and the time deltas between events are tracked. These attributes are then stored in memory, on disk or in a database and associated with the content delivered, the channel used for delivery and the user. These can be used to measure and indicate the most effective content, delivery channel and path/sequence of events.

[0439] Illustrated in FIG. 7 is one example calculation of an engagement score based on tracked information associated with content delivery and redemption. At 702 a frequency is determined for a particular offer based on tracked data. At 704 data associated with the number of times the content/offer was viewed is calculated, the frequency for acceptances and/or printing calculated at 706, the frequency for redemption (e.g. swiped card, scanned coupon to redeem) calculated at 708, and any money spent as the result of those actions tracked at 710. The various frequencies can be reduced to a probability factored with an amount of money that was spent as a result of the redemption to determine an engagement score. The engagement score can then be used to tailor how the system presents content, selects delivery channels, among other options.

[0440] In one aspect of this invention, the online system has external devices, applications and process to manage the redemption of coupons and offers delivered by the system. These external devices, applications and processes are connected to the online system through a public or private data network. For example, the online system can have an external device that attaches to a computer which is also attached to the public internet. The device also has a software application that runs on a server and interfaces with the device through a web browser. An interface exists between the device, the computer, the browser and the public internet. This device has an integrated bar code scanner and when coupons delivered by the online system are scanned by this device, the online system is signaled through the interface for the redemption of the coupon. This allows the system to achieve complete end-to-end tracking without the need for data from an external or connected account.

[0441] In one aspect of this invention, the online system has a software application or device that runs on or interfaces with a casino management system, networked gaming system, 'on-line' lottery system, retail point-of-sale, gaming machine, hand-held device, cell phone or pda. This software application or device then can manage different aspects of data transfer, content delivery recognition, coupon redemption and data collection for the online system.

[0442] For example, a slot machine running on the floor of the casino is managed by a networked gaming system. The online system has an external application that is built and configured to operate on the networked gaming system. The application can the track play on the slot machine and report that tracked play to the online system, using a unique identifier to indicate the user playing at the slot machine.

[0443] For another example, the online system has an external application that is build and configured to operate on an iPhone. The application can then solicit data from the user and transfer to the online system. The application can also operate as a device-specific element for the management of content being delivered to the user, through the iPhone.

[0444] In one aspect of this invention, the system can analyze attributes of engagement to determine efficiencies. For example, based on analysis of attribute data, it can be reported

that coupons that can be redeemed directly at specific gaming devices result in a higher spend per visit. So, the gaming establishment may decide to focus more of their marketing efforts on coupons that are redeemable at specific gaming devices.

[0445] Various embodiments of system and methods for managing interactive user engagement include the elements recited below, individually, in combination, and in any combination of the individual elements.

- [0446]** Player identification
- [0447]** Uniquely identify player
- [0448]** Creation of player account
- [0449]** Created with an online system—trigger search for player at player at External Accounts (include CMS systems, player's club accounts, Facebook, . . . lists)
- [0450]** Questionnaire—relationships with external establishments
- [0451]** Initial creation—
- [0452]** Rely on player provided info
- [0453]** Scan computer system for cookies, browse history, target additional search outside of info provided
- [0454]** Dynamically aggregate web usage/profile and trigger subsequent External Account checks
- [0455]** Co-generation of External Account
- [0456]** Trigger based on internal account creation
- [0457]** Creation of CMS account and internal account responsive to external account (e.g., an Internet-based account)
- [0458]** Player Account includes Player Profile
- [0459]** Player Account/Player profile can be scored
- [0460]** Scoring details
- [0461]** Dynamically update player profile based on demographic information (browse activity, dob, game preference, etc.), activity on/off property, online/offline behavior, preferences indicated by the player
- [0462]** Player Account/Profile can be configured to control Content and Channel Delivery
- [0463]** In particular—Gaming Limitation pre-generated by player
- [0464]** Jurisdictional Limitation Associated with Player Profile
- [0465]** Absolute limit on gambling activity for above
 - [0466]** Stop loss at 50\$/day hour etc.
 - [0467]** Day/Weekend target \$1000 max loss
- [0468]** Identify propensities based on comparison to reference data collected from other players
- [0469]** Collection of Demographic Information from Our Account and From External Account Sources
- [0470]** Questionnaires, Query external account sources, provide interface between Our account and external sources
- [0471]** Entry of external account credentials (user name sign-on etc)
- [0472]** Cookie retrieval to target additional external sources
- [0473]** Identify player population
- [0474]** Use in association with not completely identified player(s)
- [0475]** Generate unique player record that can become uniquely tied to player
- [0476]** Update Player Records
- [0477]** Periodically poll/pull/push request data
- [0478]** Queue updates
- [0479]** Batch processing

- [0480] Establish triggers configured to push data changes
- [0481] Identify deltas update accordingly
- [0482] Push Data change information to External Accounts
- [0483] Establish triggers to pass updated information to External Sources
- [0484] Bi-Directional Information Flow
- [0485] Channel Management
- [0486] Associated delivery channels with player, player account, player profile
- [0487] Delivery Channel includes cell phone, email, web page, Facebook . . . etc.—any perceptible medium for delivering information
- [0488] Create unique channel identifier
- [0489] Classify delivery channel
- [0490] Establish Channel Profile/Classify Delivery Channel
- [0491] Record characteristics of delivery mechanism
- [0492] Text address—Text only delivery
- [0493] Multimedia delivery—capable of receiving media files
- [0494] Device profiles
- [0495] Optimize content delivery characteristics for cell phone; laptop; computer; mobile device; physical Display characteristics
- [0496] Filtering Rules
- [0497] Prohibit content for Channel, etc.
- [0498] Preferred Channel/Effective Channel Selection—
- [0499] Channel defined by user
- [0500] Channel defined by Operator
- [0501] Channel defined by Content Provider
- [0502] Channel dynamically assigned based on profile analysis
- [0503] Channel dynamically assigned based on behavior analysis
- [0504] ROI calculation
- [0505] Predictive ROI calculation
- [0506] Effective Channel Selection
- [0507] Dynamically assigned based on profile and behavior
- [0508] Authentication mechanisms
- [0509] Historical Information on Channel Engagement
- [0510] Track actual conversion/success of delivery
- [0511] Track timing of conversion/success
- [0512] Using both determine Delivery Channel(s)
- [0513] Content Management
- [0514] Associate content with Delivery Channel
- [0515] Determine eligibility to receive Content
- [0516] Associate Content with Identifiers/Content Profile
- [0517] Use Identifiers to Classify
- [0518] User Identifiers to retrieve content
- [0519] Content Delivery Mechanism
- [0520] Selected by user, operator, provider, dynamically determined
- [0521] Set preferred channel
- [0522] Set required channel
- [0523] Set plurality of channels
- [0524] Establish Delivery Triggers
- [0525] Notification alerts
- [0526] Packaging Content/Delivery Content
- [0527] Alter/Refine Content based on Delivery Channel Identified
- [0528] Scaling content to delivery channel profile
- [0529] Scale to device profile
- [0530] Translate Content to Delivery Channel/Channel Profile
- [0531] Eligibility
- [0532] Eligibility Threshold
- [0533] Can be as little as: player from (town)
 - [0534] For example, statistics tell us player's from Town gamble a lot
- [0535] Opt-in
- [0536] Player Scoring tie in, Player tiering,
- [0537] Eligibility for particular content can be scaled based on player value, and/or specific player characteristics (e.g. relationship with specific external account)
- [0538] Scaling can occur on any demographic
- [0539] Eligibility may also be governed by defined limits
- [0540] Player established limits in profile
- [0541] Jurisdictional limits generically
- [0542] Multi level Eligibility
- [0543] First tier content
- [0544] Second tier content only accessible after First tier access and/or completion
- [0545] Eligibility based on behavioral tracking, analysis, prediction
- [0546] Define Eligibility Matrix
- [0547] Tracking of Engagement
- [0548] Track and defined metrics for deliverability
- [0549] Success rate of delivery channel
- [0550] Adaptive selection of delivery channel based on tracked data
- [0551] Success rates
- [0552] State based tracking
- [0553] Active, Inactive, Dead, live, etc.
- [0554] Success rate of content
- [0555] Matching content to player appropriately
- [0556] Player accesses content—success
- [0557] Activity performed associated with content—success
- [0558] Redemption tracking
- [0559] Access tracking
- [0560] Timing information
- [0561] Associated Actions tracking
- [0562] Robots for scraping pages
- [0563] Update Player Profile/Channel Profile based on tracked engagement information
- [0564] Path-based engagement, evaluating sequences of engagement paths based on parameters (e.g., ROI) to determine effective engagement paths that can be applied to current player or other players (e.g., ones having similar profiles)
- [0565] Various embodiments according to the present invention may be implemented on one or more computer systems. These computer systems may be, for example, general-purpose computers such as those based on Intel Atom, Core, or PENTIUM-type processor, IBM PowerPC, AMD Athlon or Opteron, Sun UltraSPARC, or any other type of processor. It should be appreciated that one or more of any type computer system may be used to manage interactive user engagement, manage and deliver content, track engagement, calculate player value, dynamically determine a delivery channel, communication content, and customize content based on selected communication channel according to vari-

ous embodiments of the invention. Further, the system may be located on a single computer or may be distributed among a plurality of computers attached by a communications network.

[0566] A general-purpose computer system according to one embodiment of the invention is configured to perform any of the described operations and/or algorithms, including but not limited to providing for management of content, display of a user interface to enter external and/or online account information, register for external and/or online accounts, manage user preference information, manage user identity information, identify content uniquely, identify content delivery channels uniquely, automatically select an optimal delivery channel, calculate return on investment for a delivery path, among other options. It should be appreciated, however, that the system may perform other operations and/or algorithms, including operations for registration, storage and management of accounts, associating accounts with online and external accounts, managing exclusions, imposing jurisdictional regulations on player activity, providing user profiles, permitting users to manage their profiles, register, store and manage delivery channels and content, determining eligibility to receive and/or view content, scaling content for a delivery channel, measuring deliverability, tracking engagement with delivered content, and tracking subsequent and related actions, etc. The operations and/or algorithms described herein can also be encoded as software executing on hardware that define a processing component, that can define portions of a specially configured general purpose computer, reside on an individual general purpose computer, and/or reside on multiple general purpose computers.

[0567] FIG. 9 shows a block diagram of a general-purpose computer system 900 in which various aspects of the present invention can be practiced. For example, various aspects of the invention can be implemented as specialized software executing in one or more computer systems including general-purpose computer systems 1104, 1106, and 1108 communicating over network 1102 shown in FIG. 11. Computer system 900 may include a processor 906 connected to one or more memory devices 910, such as a disk drive, memory, or other device for storing data. Memory 910 is typically used for storing programs and data during operation of the computer system 900. Components of computer system 900 can be coupled by an interconnection mechanism 908, which may include one or more busses (e.g., between components that are integrated within a same machine) and/or a network (e.g., between components that reside on separate discrete machines). The interconnection mechanism enables communications (e.g., data, instructions) to be exchanged between system components of system 900.

[0568] Computer system 900 may also include one or more input/output (I/O) devices 904, for example, a keyboard, mouse, trackball, microphone, touch screen, a printing device, display screen, speaker, etc. Storage 912, typically includes a computer readable and writeable nonvolatile recording medium in which signals are stored that define a program to be executed by the processor or information stored on or in the medium to be processed by the program.

[0569] The medium may, for example, be a disk 1002 or flash memory as shown in FIG. 10. Typically, in operation, the processor causes data to be read from the nonvolatile recording medium into another memory 1004 that allows for faster access to the information by the processor than does the

medium. This memory is typically a volatile, random access memory such as a dynamic random access memory (DRAM) or static memory (SRAM).

[0570] Referring again to FIG. 9, the memory can be located in storage 912 as shown, or in memory system 910. The processor 906 generally manipulates the data within the memory 910, and then copies the data to the medium associated with storage 912 after processing is completed. A variety of mechanisms are known for managing data movement between the medium and integrated circuit memory element and the invention is not limited thereto. The invention is not limited to a particular memory system or storage system.

[0571] The computer system may include specially-programmed, special-purpose hardware, for example, an application-specific integrated circuit (ASIC). Aspects of the invention can be implemented in software, hardware or firmware, or any combination thereof. Although computer system 900 is shown by way of example as one type of computer system upon which various aspects of the invention can be practiced, it should be appreciated that aspects of the invention are not limited to being implemented on the computer system as shown in FIG. 9. Various aspects of the invention can be practiced on one or more computers having a different architectures or components than that shown in FIG. 9.

[0572] It should be appreciated that the invention is not limited to executing on any particular system or group of systems. Also, it should be appreciated that the invention is not limited to any particular distributed architecture, network, or communication protocol.

[0573] Various embodiments of the invention can be programmed using an object-oriented programming language, such as Java, C++, Ada, or C# (C-Sharp). Other object-oriented programming languages may also be used. Alternatively, functional, scripting, and/or logical programming languages can be used. Various aspects of the invention can be implemented in a non-programmed environment (e.g., documents created in HTML, XML or other format that, when viewed in a window of a browser program, render aspects of a graphical-user interface (GUI) or perform other functions). The system libraries of the programming languages are incorporated herein by reference. Various aspects of the invention can be implemented as programmed or non-programmed elements, or any combination thereof.

[0574] Various aspects of this invention can be implemented by one or more systems similar to system 900. For instance, the system can be a distributed system (e.g., client server, multi-tier system) comprising multiple general-purpose computer systems. In one example, the system includes software processes executing on a system associated with registering a user for an online and/or external account, interface processes for tying the online and external systems together, co-generation of user account accounts on an online and external account system. These systems may permit the end users to access content in data locally or may permit remote access to content in data, the end users, for example, can employ a web browser to access content for which they are eligible, access a web page to redeem content, among other operations.

[0575] There can be other computer systems that perform functions such as receiving and associating user account information with external account information, managing content, managing content delivery channels, and tracking content associated activity, among other functions. These systems can be distributed among a communication system

such as the Internet. One such distributed network, as discussed below with respect to FIG. 11, can be used to implement various aspects of the invention.

[0576] FIG. 11 shows an architecture diagram of an example distributed system 1100 suitable for implementing various aspects of the invention. It should be appreciated that FIG. 11 is used for illustration purposes only, and that other architectures can be used to facilitate one or more aspects of the invention.

[0577] System 1100 may include one or more general-purpose computer systems distributed among a network 1102 such as, for example, the Internet. Such systems may cooperate to perform functions related to managing interactive user engagement. In an example of one such system, one or more users operate one or more client computer systems 1104, 1106, and 1108 through which the user can access content, register accounts, enter external account information and potentially redeem offers. It should be understood that the one or more client computer systems 1104, 1106, and 1108 may also be used to access, for example, external account registration systems, content, user profile management, etc. In one example, users interface with the system via an Internet-based interface.

[0578] In another example, a system 1104 includes a browser program such as the Microsoft Internet Explorer application program, Mozilla's FireFox, or Google's Chrome browser through which one or more websites can be accessed. Further, there can be one or more application programs that are executed on system 1104 that perform functions associated with interactive user engagement. For example, system 1104 may include one or more local databases for storing, caching and/or retrieving patron profiles, potential offers, tracked content activity, redemption activity, etc.

[0579] Network 1102 may also include, as part of the system for managing interactive user engagement, one or more server systems, which can be implemented on general-purpose computers that cooperate to perform various functions including receiving user account information, retrieving database information on player account information, executing interface processes between external accounts and the online system and other functions. System 1100 may execute any number of software programs or processes and the invention is not limited to any particular type or number of processes. Such processes can perform the various workflows associated with the system for managing interactive user engagement. It should be appreciated that various embodiments described in any portion of the above description can be performed alone or in combination with other embodiments described herein.

[0580] Having thus described several aspects and embodiments of this invention, it is to be appreciated that various alterations, modifications and improvements will readily occur to those skilled in the art. Such alterations, modifications, and improvements are intended to be part of this disclosure, and are intended to be within the spirit and scope of the invention. Accordingly, the foregoing description is by way of example only.

[0581] Use of ordinal terms such as "first", "second", "third", "a", "b" "c" etc., in the claims to modify or otherwise identify a claim element does not by itself connote any priority, precedence, or order of one claim element over another or the temporal order in which acts of a method are performed, but are used merely as labels to distinguish one claim element

having a certain name from another element having a same name (but for use of the ordinal term) to distinguish the claim elements.

What is claimed is:

1. A computer implemented method for managing interactive user engagement, the method comprising the acts of:
 - registering, over a computer network, a user for a user account;
 - associating, by a computer system, an external account with the user account;
 - determining, by the computer system, eligibility of the user to receive content;
 - identifying, by the computer system, at least one delivery channel, wherein the delivery channel conveys a communication configured to provide the content in a perceptible form to the user;
 - delivering the content to the user over the at least one delivery channel; and
 - tracking, by the computer system, content associated activity.
2. The method according to claim 1, wherein the external account comprises a third party service, and further requires user identification to access the third party service.
3. The method according to claim 1, wherein the act of associating, by the computer system, the external account with the user account includes an act of generating the external account on behalf of the user.
4. The method according to claim 3, wherein the external account comprises a user reward account.
5. The method according to claim 1, further comprising an act of establishing a user profile associated with a user account.
6. The method according to claim 1, further comprising an act of permitting a user to define preference information associated with the at least one delivery channel.
7. The method according to claim 1, further comprising an act of establishing preference information associated with the at least one delivery channel.
8. The method according to claim 7, further comprising an act of recording preference information associated with the at least one delivery channel with a user profile.
9. The method according to claim 1, wherein the act of registering, over a computer network, the user for the user account includes an act of providing for generation of an external account for the user.
10. The method according to claim 9, wherein the act of providing for generation of an external account for the user includes transmitting user information to an external account generation system.
11. The method according to claim 10, wherein the external account generation system includes at least one of a casino management system and a lottery management system.
12. The method according to claim 1, further comprising an act of requesting the user to identify external accounts during registration.
13. The method according to claim 5, further comprising an act of scoring the user based at least in part of information associated with the user account.
14. The method according to claim 1, further comprising an act of updating the user account with information associated with the user.
15. The method according to claim 5, further comprising an act of updating the user profile with information associated with the user, wherein the information associated with the

user includes at least one of demographic information, user activity occurring at a gambling location, user activity occurring at an affiliated location, user activity occurring at a redemption location, user online activity, and user offline activity.

16. The method according to claim 1, wherein the act of identifying, by the computer system, the at least one delivery channel includes an act of determining a preferred delivery channel.

17. The method according to claim 16, wherein the preferred delivery channel is assigned by the computer system.

18. The method according to claim 16, wherein the preferred delivery channel is defined according to the content delivered.

19. The method according to claim 16, wherein the preferred delivery channel is determined dynamically.

20. The method according to claim 16, wherein the preferred delivery channel is determined dynamically based at least in part on at least one of a calculation of return, a prediction of return, the user profile, and user profile and user behavior.

21. The method according to claim 1, wherein the act of identifying, by the computer system, the at least one delivery channel includes determining at least one of a jurisdictional limitation, a user preference, a scoring based on user associated information, a selection based on content associated information, a probability of engagement, and a prediction of engagement.

22. The method according to claim 1, further comprising an act of associating a delivery channel with the user.

23. The method according to claim 22, further comprising an act of creating a unique identifier for the delivery channel.

24. The method according to claim 1, further comprising an act of classifying the delivery channel.

25. The method according to claim 20, further comprising an act of creating a channel profile.

26. The method according to claim 24, wherein the act of classifying the delivery channel includes an act of storing historical activity information associated with delivered content.

27. The method according to claim 26, wherein the historical activity information includes information on success of delivery of the content, timing of access to the content, and timing of redemption of the content.

28. The method according to claim 1, further comprising an act of classifying the content.

29. The method according to claim 1, further comprising an act of associating the content with the at least one delivery channel.

30. The method according to claim 29, wherein the act of associating the content with the at least one delivery channel includes an act of identifying a delivery channel used with the content.

31. The method according to claim 1, wherein the act of delivering the content to the user over the at least one delivery channel includes an act of packing the content for delivery.

32. The method according to claim 31, wherein the act of packing the content for delivery includes an act of scaling the content.

33. The method according to claim 1, wherein the act of tracking, by the computer system, content associated activity includes tracking metrics associated with successful delivery of the content.

34. The method according to claim 33, wherein the act of tracking, by the computer system, content associated activity includes tracking a success as access to the content by the user.

35. The method according to claim 33, wherein the act of tracking, by the computer system, content associated activity includes tracking a success as redemption of the content by the user.

36. The method according to claim 33, wherein the act of tracking, by the computer system, content associated activity includes accepting information from external accounts.

37. The method according to claim 1, further comprising an act of generating an optimal engagement path for a user.

38. The method according to claim 20, wherein the calculation of return includes a determination of cost of delivery, probability of redemption, and value of redemption.

39. The method according to claim 20, wherein the prediction of return includes a prediction of cost of delivery, of redemption, and value of redemption.

40. A method for determining an optimal engagement path for content delivery to at least one user, the method comprising:

- establishing at least one delivery channel for communicating with the at least one user;
- delivery content to the at least one user over the at least one delivery channel;
- tracking successful delivery to the at least one user over the at least one delivery channel; and
- determining an optimal delivery path for any content.

41. A system for managing interactive user engagement, the system comprising:

- a registration component configured to register a user for a user account;
- an association component configured to associated an external account with the user account;
- an eligibility component configured to determine eligibility of the user to receive content;
- a selection component configured to identify at least one delivery channel, wherein the delivery channel conveys a communication configured to provide the content in a perceptible form to the user;
- a transmission component configured to deliver the content to the user over the at least one delivery channel; and
- a tracking component configured to track content associated activity.

42. A system for determining an optimal engagement path for content delivery to at least one user, the system comprising:

- a registration component configured to establish at least one delivery channel for communicating with the at least one user;
- a transmission component configured to deliver content to the at least one user over the at least one delivery channel;
- a tracking component for identifying successful delivery to the at least one user over the at least one delivery channel; and
- an optimization component configured to determine an optimal delivery path for any content.